DOCUMENTED BRIEFING

RAND

What Helps and What Hurts

How Ten Activities Affect Readiness and Quality of Life at Three 8AF Wings

Thomas Fossen, Lawrence M. Hanser,
John Stillion, Marc N. Elliott, S. Craig Moore

Project AIR FORCE

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PREFACE

This documented briefing responds to a 1996 request from Lieutenant General Phillip Ford for direct assistance in addressing the workloads that affect wings in the Eighth Air Force. General Ford sensed a high pace of operations across 8AF, but he had no ready data to characterize or analyze the situation. Encapsulating the situation, he said, "We know we're working *hard*. But are we working *smart*?" Aware of internal Air Force efforts to review how overseas operations during peacetime stress so-called high-demand, low-density units, he wanted to consider a broader spectrum of activities and units.

Primarily using staff from an ongoing Force Mix, Capability, and Readiness project and from a planned project called Organizational Options for Forces and Infrastructure, Project AIR FORCE developed and applied a survey to examine how peacetime operations, exercises, inspections, and a range of other activities affect different elements of an Air Force wing--within operations, logistics, support, and medical groups, and within the wing staff. This documented briefing summarizes the results, developed under Project AIR FORCE's Resource Management and System Acquisition Program.

The briefing was first reviewed by commanders and staffs at Minot, Cannon, and Little Rock Air Force Bases, whose leaders provided the data summarized herein, and then by Lieutenant General Ford. Subsequently, the briefing was presented to the commanders and staffs at the Air Combat Command and the Air Education and Training Command and to the Chief of Staff of the Air Force and other senior leaders at the Air Staff, representing the Vice Chief of Staff; the Deputy Chiefs of Staff for Operations, for Plans and Programs, for Personnel, for Installations and Logistics, and for Communications and Information; the Surgeon General; the Chief of Security Forces; the Inspector General; the Commander's Action Groups for the Secretary of the Air Force and for the Chief of Staff of the Air Force; the Offices of Public Affairs; and the Air Force Studies and Analyses Agency.

Lieutenant Colonel Tom Fossen was an Air Force Research Fellow at RAND, and his leadership of this research is in fulfillment of the requirements of Air Force Senior Service School.

PROJECT AIR FORCE

Project AIR FORCE, a division of RAND, is the Air Force federally funded research and development center (FFRDC) for studies and analyses. It provides the Air Force with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future aerospace forces. Research is performed in three programs: Strategy and Doctrine, Force Modernization and Employment, and Resource Management and System Acquisition.

CONTENTS

SUMMARY

Air Force leaders are concerned that a high pace of operations is stressing Air Force units and personnel, and they're concerned about the potential negative effects on combat readiness and quality of life. Over the past ten years, mission forces have been cut 47 percent and infrastructure forces 30 percent, increasing the burden that peacekeeping operations and other duties have placed on the force. Senior Air Force leaders are concerned that overworked pilots and others will leave the service in greater numbers. Recent efforts have tried to isolate the reasons for this stress, focusing on specific activities believed to be most responsible.

Initial research efforts to understand this problem cast a narrow spotlight on stressed weapons systems and their crews at the national level. Research then focused on the stress-related activities of specific squadrons within these stressed national systems, but did not examine the related activities of other units also affected by these stressed systems. The focus was primarily on one activity--i.e., temporary duty (TDY)--which is widely thought to be associated with stress, but the varying definitions and systems for tracking TDY made analysis difficult. The Air Combat Command studied how assignments from outside sources caused additional stress. Within 8AF, Dyess Air Force Base attempted to represent a wider range of activities in all areas of operations and support to identify the driving forces behind their heavy workloads. But until now there has been no systematic effort to survey all units within a wing (as opposed to selected squadrons) with respect to a full range of work activities (as opposed to just TDY).

To develop a more comprehensive overview of the problem, we surveyed all elements within three 8AF wings, identifying activities perceived as having the most positive or degrading effect on aspects of readiness and quality of life. Our survey captures only one point in time, and as such does not tell whether workloads and stress are higher, lower, or the same as in the past. Rather, the results highlight concerns and point to actions the Air Force can take to manage the most problematic activities and thus to enhance readiness and quality of life.

Our face-to-face surveys collected data from nearly 500 commanders and supervisors from three diverse wings (operating and supporting fighters, bombers, and tactical airlifters), from all mission areas (operations, logistics, support, medical, and wing staff), and from all organizational

viii

levels (wing, group, squadron, and flight/section). Their responses represent about 15,000 Air Force military and civilian personnel.

The surveys--conducted at Minot, Little Rock, and Cannon Air Force Bases--examined the effects of a comprehensive list of ten activities on readiness and quality of life. The ten activities included in the surveys were routine peacetime operations and local training, off-station training, operations other than war, inspections, wing exercises, command exercises, joint exercises, combined exercises, other higher headquarters taskings, and other local taskings. The surveys yielded a surprising consensus about what helps and what degrades readiness and quality of life in the U.S. Air Force.

WHAT HELPS AND WHAT HURTS

Respondents from all wings and organizational levels concurred that the most positive activities are routine peacetime operations and local training. On average, 78 percent of those surveyed want to increase the amount of time spent on these activities. Respondents also concurred that the most degrading activities are not confined to TDY and to operations other than war (OOTW), the activity most commonly thought to drain readiness. In fact, more than 70 percent of those surveyed said that inspections and wing exercises degrade readiness, because they often entail fruitless activities that consume inordinate amounts of time. These results should not be interpreted as simply reflecting a dislike for inspections and wing exercises. Respondents overwhelmingly reported a desire to reduce but not to eliminate the amount of time spent in these activities. The encouraging news is that the Air Force "owns" its wing exercises and inspections and thus should be able to manage them in more advantageous ways.

Inspections and exercises significantly increase the work week at all bases. The routine work week reported at all bases averages about 48 hours, but the work week during inspections and wing exercises balloons to more than 60 hours at all bases. During inspections and wing exercises (command exercises at Minot Air Force Base in particular), the average work week increases to 80 hours and, for security police, to 100 hours. Since part of the intent of such activities is to practice and test capabilities under stress, it is not inherently bad that they lengthen work weeks and increase intensity--especially if they improve mission readiness. But survey respondents did not view them as improving readiness.

Routine operations and local training, which account for roughly half of the weeks over the course of the year, have the most positive effects on

both wartime and peacetime readiness at all three bases, according to those surveyed. Off-station training activities get mixed reviews from the three bases, but all eight other activity areas get consistently more negative rankings from all three bases. Inspections and wing exercises score the worst at Minot, whereas higher headquarters and other local taskings score the worst at Cannon and among the worst at Little Rock and Minot.

All group types across all three wings perceive degradation in mission readiness from almost all nonroutine activities, but the medical groups perceive significantly more degradation from nonroutine activities. Compared to the other groups, the medical groups also rank inspections and wing exercises especially low.

The survey defined "quality of life" in two categories: professional growth, and personal and family life. On average, professional growth at all three bases benefited most from routine operations and local training, and off-station training. At the very least, these activities had no negative effect on professional growth. These activities also had the least negative effect on personal and family life. On average, the activities most negative to quality of life included OOTW, inspections, and various exercises, depending on the base. All security police squadrons found OOTW, inspections, and wing exercises to be very negative to personal and family life.

All wings and all groups would prefer to spend more time on routine activities and less on inspections and wing exercises. At Minot Air Force Base, the inspections and wing exercises are regarded as having particularly negative effects on readiness and quality of life.

Of all the groups, the medical group has the strongest desire to spend more time on routine activities, even though this group already spends the most time on routine activities. Nonroutine activities are regarded as significantly more negative by medical groups than other groups, even though the increased workload during inspections and wing exercises is not as great for the medical group as for others.

At the squadron level, security police suffer especially negative effects on personal and family life from OOTW, inspections, and wing exercises. Security police, services, and communications squadrons all have significantly less time than other squadrons for routine activities. As the extreme case, communications squadrons spend only 33 percent of their time on routine activities and equally as much time on inspections and wing exercises, whereas they would prefer to spend 60 percent of their

time on routine activities and only 12 percent on inspections and wing exercises.

CONCLUSIONS AND RECOMMENDATIONS

Inspections and exercises apparently represent both quantitative and qualitative problems for readiness and quality of life. One respondent summed up the effects on readiness: "The frequency of inspections and exercises does not allow us enough time to identify mistakes, learn from them, and then develop and implement corrective actions! We end up making the same mistakes over and over! (That's) not so serious in practice, but (it's) absolutely catastrophic in war!" Another summed up the effects on quality of life: "The outrageous work hours . . . definitely stress family life and lead to drinking, abuse, depression, etc." The consensus across three diverse wings suggests that the problems may be widespread throughout the Air Force at large.

The Air Force has already developed preliminary recommendations to address some of these problems. In February 1997, the Chief of Staff of the Air Force Blue Ribbon Commission on Organizational Evaluations and Awards recommended limiting compliance inspections to critical areas only, increasing the use of sampling, preventing significant preparation, and placing a cap on time spent inspecting, assessing, and evaluating.

This survey reinforces the importance of sharpening the focus of inspections and exercises and reducing the time spent on them in order to enhance readiness and quality of life. Air Force efforts to remedy the problems highlighted in this study and by other related study teams should be integrated and coordinated. The Air Force may want to use a similar survey approach to examine additional wings or functional areas or to find out, later, whether steps taken to improve the situation have had the desired effects.

ACKNOWLEDGMENTS

Things the Air Force Does to Itself

Effects of Workloads on Readiness and Quality of Life in 8AF

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1   8/27/97

This briefing was prepared at the request of Lieutenant General Ford, 8AF/CC. We have presented the briefing at Minot and Cannon AFBs, two of the three bases that provided most of the data that we summarize, as well as to other senior Air Force leaders, including General Fogleman, Chief of Staff; General Hawley, ACC/CC; General Newton, AETC/CC; Lieutenant General Dula, ACC/CV; Lieutenant General Veseley, AF/CVA; Lieutenant General Ford, 8AF/CC; Lieutenant General Swope, SAF/IG; Lieutenant General Roadman, AF/SG; Lieutenant General Donahue, AF/SC; Major General Peterson, AF/DXO; Major General Henderson, AF/XOC; and Brigadier General Schwalier, AF/XOO.

Overview

⇨• **Maintaining readiness and quality of life for Air Force people -- an AF-wide problem**

- **RAND's approach complements ongoing efforts**

- **Lessons from three 8AF wings**

- **Actions that will help the Air Force**

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2   8/27/97

Last year, the 8AF commander asked us to help him look at problems of high operations and personnel tempo (OPTEMPO/PERSTEMPO) and other activities affecting readiness and quality of life.

RAND developed a method to complement similar ongoing efforts and visited four 8AF wings to learn more about activities affecting readiness and quality of life. This briefing summarizes findings from only three wings since the first was a partial, test case to see if our survey approach and draft questionnaire were promising.

Lessons learned from these three diverse 8AF wings revealed possible AF-wide problem areas and insight about potential actions to address them.

Maintaining Readiness and Quality of Life
Do We Understand the Problem?

Military personnel and their families are paying an increasingly higher human price from repeatedly being asked to "do more with less..."

U.S. Representative Floyd Spence
Military Readiness 1997: Rhetoric and Reality
April 9, 1997

RESOURCES

COMMITMENTS

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3   6/27/97
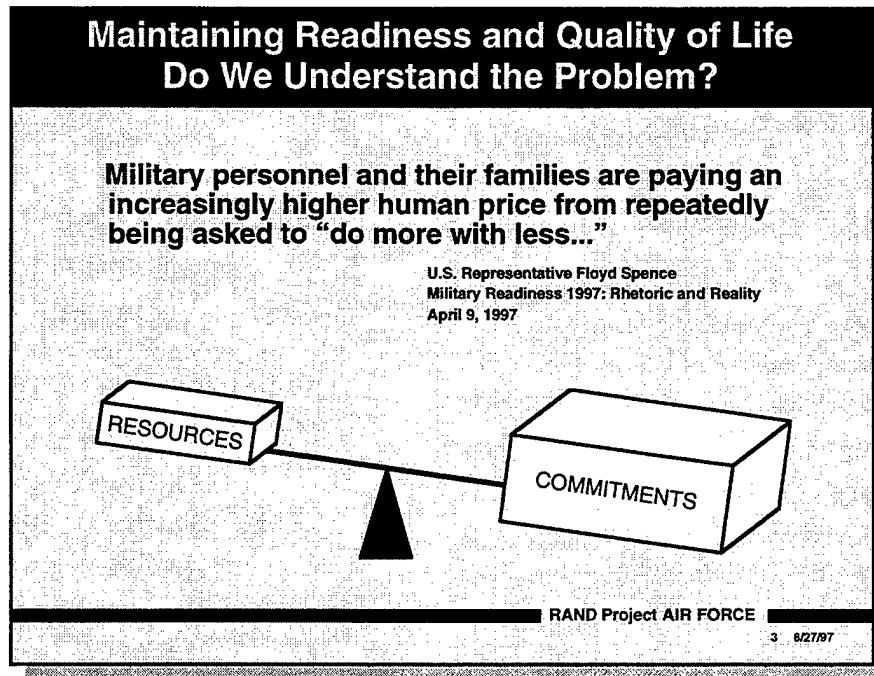
Air Force resources are decreasing: people, budget, equipment, and overseas bases. But do people know that

- A March 1997 General Accounting Office (GAO) report on force structure states that over the last ten years mission forces have borne the brunt of reductions, cut by 47%, while infrastructure forces have been cut only 30% (overall reduction of 37%).

- During the same time, peacekeeping operations seem to have increased in number and duration. The trend may continue in support of our national security strategy of engagement and enlargement.

- Both trends cause great concern among leaders in our government.

- U.S. Representative F. Spence, Chairman of the House National Security Committee, recently warned of worsening military readiness.

- AF senior leaders are concerned that AF pilots are "just a step away from voting with their feet" by leaving the service. (Pilot separations are up.)

- The Air Combat Command (ACC) commander told attendees at the Air Force Academy's January 1997 Air Warfare symposium, " . . . operations tempo is so high in some parts of ACC that overworked people may start leaving the service in droves . . . ."

In January and February 1997, we met with nearly 500 commanders and supervisors from three diverse wings, all organizational levels (wing, group, squadron, and flight/section levels), and from all groups and mission areas to develop a better understanding of this problem.

What We Learned ...

People in 8AF have a consistent perception of what helps and what degrades readiness and quality of life
- **The most helpful activities are routine peacetime operations and local training**
- **In many cases, inspections and exercises are perceived to be just as degrading to readiness as OOTW and its associated TDY**
- **The AF "owns" most of the activities perceived as negative**

Exercises (especially wing exercises) and inspections degrade readiness because they include unfruitful activities and consume large amounts of time

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4   8/27/97

8AF people have a consistent perception of what helps and what degrades readiness and quality of life.

- The most positive activity is routine peacetime operations and local training.

    - 78% of those surveyed want to increase routine peacetime operations and local training.

- The most degrading activities are not just military operations other than war (OOTW), which require substantial amounts of time away from home (temporary duty, or TDY), but exercises and inspections as well.

    - For example, over 70% of respondents thought inspections and wing exercises degraded readiness.

    - Respondents across all three wings also recommended that significantly less time should be spent on inspections and wing exercises.

- The Air Force is in charge of most of the activities perceived as negative, so means may be available to relieve substantial portions of the stress from these activities.

This consistent perception comes from a diverse group of nearly 500 commanders and supervisors

- representing three diverse wings (fighters, bombers, and tactical airlift) and all mission areas (operations, logistics, support, and medical) and

- speaking for 15,000 AF people at the grassroots level working the line, AF people most directly affected by activities that influence readiness and quality of life.

Now for a more detailed picture of what we learned.

We will describe our approach to complement the efforts of others who are also addressing parts of the problem we have been discussing.

**Complement the Efforts of Others,
Adding "Non-Stressed" Systems & Activities**

All systems,
all activities

AF squadrons with
stressed systems

AF stressed systems

AF TDY tracking

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6   8/27/97

This diagram starts by depicting "all" activities and systems stressing AF people (the large oval). To illustrate the various efforts and how they complement each other, smaller ovals (and their focus areas) are shown as overlapping subsets of the total.

Initial Department of Defense (DoD) efforts addressed stressed systems and their crews on the national level, in the form of Global Military Force Policy (GMFP) from the Joint Chiefs of Staff (JCS). The JCS required senior decisionmakers to be aware of the thresholds at which readiness and quality of life degrade, as well as the adverse effects of continued operations above these thresholds. GMFP identified stressed weapons systems, not units, assuming taskings would be "fair-shared" across units.

By looking at squadrons owning these stressed systems, the Air Force Studies and Analysis Agency (AFSAA) expanded the focus from systems to activities causing stress. They identified negative effects of OPTEMPO/PERSTEMPO on the people and equipment. But they did not examine activities of units that didn't own stressed systems (operational and support), although they developed personnel and equipment stress indicators for possible use AF-wide. They recommended

- how to limit and/or manage taskings,

- human resource management improvements (fills, experience, turnover), and

- quality-of-life initiatives.

So far the AF has focused hard on one particular activity associated with stress--TDY--establishing a clear definition for all AF units so senior leaders would eventually have a "corporate view" of what was happening to AF people. In the past this was difficult because of the varying definitions of TDY and varying tracking systems.

Complement the Efforts of Others, Adding "Non-Stressed" Systems & Activities

All systems, all activities

RAND 8AF project

7WG workload

ACC Scheduling & OPTEMPO IPTs

AF squadrons with stressed systems

AF stressed systems

AF TDY tracking

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8   8/27/97
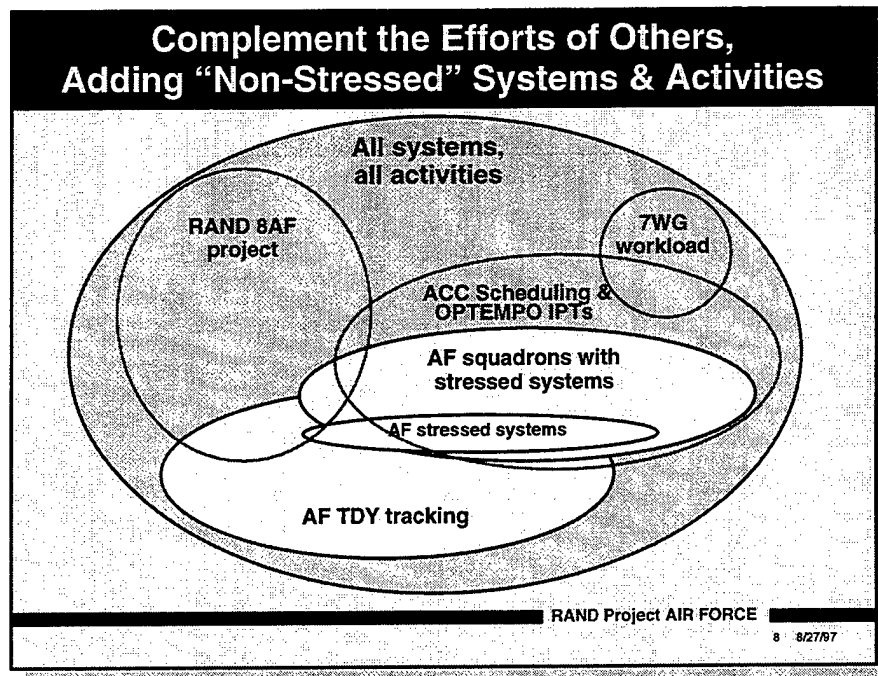
The Air Combat Command dealt with another aspect of activities causing stress: how taskings from outside sources accumulate at the wing level. ACC's Scheduling Integrated Process Team (IPT) enabled a worldwide contingency and exercise scheduling conference to build "breathing room" into the pace of deployments and to spread the work more evenly across the force. Again, the focus was mainly on TDY-related activities and exercises. ACC's OPTEMPO IPT identified more activities that cause stress and established innovative ways to identify "hot" units. They looked at contingency and/or exercise participation, deployment intervals, TDY rates, spin-up and spin-down times for contingencies and operational readiness inspections, number of exercises and surges, overdue training, and 5/7 level manning for certain specialties.

Finally, last summer, the 8AF commander (CC) shared his thoughts with RAND after the 7WG at Dyess completed a coarse review of their workload. The 7WG tried to capture all activities in all operational and support mission areas so they could better understand what was driving their high workload. Their efforts suggested significant value in looking across all units within a wing, not just squadrons owning stressed systems, and in looking at all types of work activities, not just TDY-related activities.

Our Approach

ACTIVITIES

- Routine peacetime ops and local training
- Off-station training
- Inspections
- Operations other than war
- Exercises (wing, command, joint, and combined)
- HHQ other taskings
- Other local taskings

Fighters - 27FW
Bombers - 5BW
Tactical Airlift - 314AW

Readiness

Personal/Family Life

Professional Growth

Time

Operations
Logistics
Support
Medical
Wing Staff

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9   8/27/97

In examining effects on readiness and quality of life, we decided to focus on readiness, personal and family life, professional growth, resources, and, intertwined with all, how people spend their time.

Next, we felt it important to examine all work, not just TDY-related activities (see ten activities above).

Then we examined how these activities affect readiness and quality of life for three diverse wings. We addressed all mission areas within the different groups, not just operators and maintainers.

In order to get useful data, we felt it important to go the experts, the commanders and supervisors at levels throughout an AF wing.

Commanders and supervisors included officer, enlisted, and civilian personnel.

Survey Design and Administration

- **Tested survey tool and process at 2BW in Nov 96**
- **Same pamphlet used for all participants -- carefully designed survey instrument with 42 questions on:**
  - Readiness (16), resources (7), professional growth (6), personal/family life (4), and time spent (9)
- **Surveyed most commanders and supervisors in three 8AF wings--RAND staff present throughout**

	Cannon	Little Rock	Minot	TOTALS
Ops Group	72	22	55	149
Log Group	36	38	40	114
Spt Group	30	34	43	107
Med Group	15	27	24	66
Wing Staff	11	16	11	38
TOTALS	164	137	173	474

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10   9/5/97

First, we tested our survey instrument and process at 2d Bomb Wing (2BW) November 1996.

We conducted this test on especially short notice. Because we could not survey commanders comprehensively and because the questionnaire we used was a preliminary version, we do not include in this briefing the sample data we collected at Barksdale. We used the inputs to improve the survey material and process and to find out whether we'd get interesting insights. In all cases, questionnaires were completed with RAND project members present, giving us a chance to explain our work and answer questions as the participants worked on the survey.

We developed a sample analysis on the basis of this trial, which was reviewed by 2BW and subsequently by the 8AF/CC.

Then, after revising the survey material, we surveyed three whole wings in 8AF.

Participation throughout the three wings totaled 474--that's 474 leaders from all mission areas and representing nearly 15,000 military and civilian AF members. Their responses included over 100,000 numerical values and over 1,000 written comments.

Analysis Method Notes

Responses were weighted: a response from a flight commander (one of the 474 above) who speaks for a flight of 60 people is weighted 6 times that of a flight commander who speaks for ten people. The analysis used straightforward statistical methods to identify significant differences in the data. (See Appendix A, Technical Notes.)
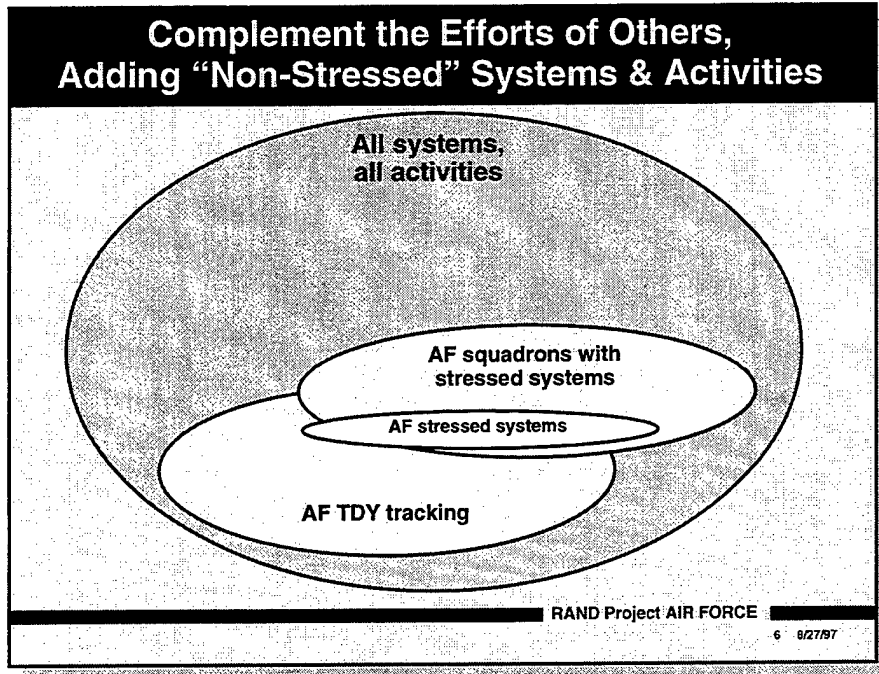
Overview

- **Maintaining readiness and quality of life for Air Force people -- an AF-wide problem**

- **RAND's approach complements ongoing efforts**

⇨ • **Lessons from three 8AF wings**
  - **Cannon, Minot, Little Rock**

- **Actions that will help the Air Force**

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11   8/27/97

Now we'll cover in more detail what we learned from commanders and supervisors in the three 8AF wings. Cannon is a fighter base, in conversion from F-111s to F-16s, Minot is a B-52 bomber base, and Little Rock is a C-130 tactical airlift base.

It is important to note that data from this survey represent a snapshot in time and cannot by themselves be used to draw inferences regarding how current working conditions in the Air Force compare to past conditions.

Operations Other Than War...
Not the Only Source of the Problem

Work activities \ Areas affected	Time spent	Work week length	Intensity of work	Impact on readiness	Professional growth	Family and personal life
Routine peacetime ops & local training	53%	◎	⊘	◎	◎	◎
Off-station training	5%	◎	◎	⊘	◎	◎
Inspections and wing exercises	19%	●	●	◗	◗	●
Operations other than war	7%	⊘	●	◗	●	●
Other exercises (Cmd, Jnt, Comb)	7%	◗	◗	◗	◗	◗
HHQ and local taskings	8%	○	○	●	○	○

Good ◎ ⊘ ○ ◗ ● Bad

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12   8/27/97

Peacekeeping or OOTW is the work activity most commonly mentioned in discussions about OPTEMPO/PERSTEMPO rates that negatively affect readiness and quality of life. But other work activities apparently have similar negative effects.

For brevity, this overview consolidates ten work activities into six:

- Routine peacetime operations and training
- Off-base training
- Inspections and wing exercises
- Peacekeeping/OOTW
- Other exercises (Command, Joint, and Combined)
- Other HHQ and local taskings.

This chart shows the amount of time 8AF personnel reported spending on the different work activities over the last 12 months. It also summarizes the reported effects of the work activities on work week length, intensity of work, readiness, etc. For any particular survey area (one of the columns), the spectrum goes from light gray--the work activity perceived as having the least negative effect--to dark gray--the activity with the most negative effect.

This summary draws attention to inspections and wing exercises as having especially negative effects and consuming a substantial portion of time.

Work Activity Legend for Charts

Routine ops and local training

Operations other than war

Wing exercises

Joint exercises

HHQ other taskings

Off-station training

Inspections

Command exercises

Combined exercises

Other local taskings

Routine OSTR OOTW INSP WGEX CMEX JTEX CBEX HHQT OLCL

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13   8/27/97
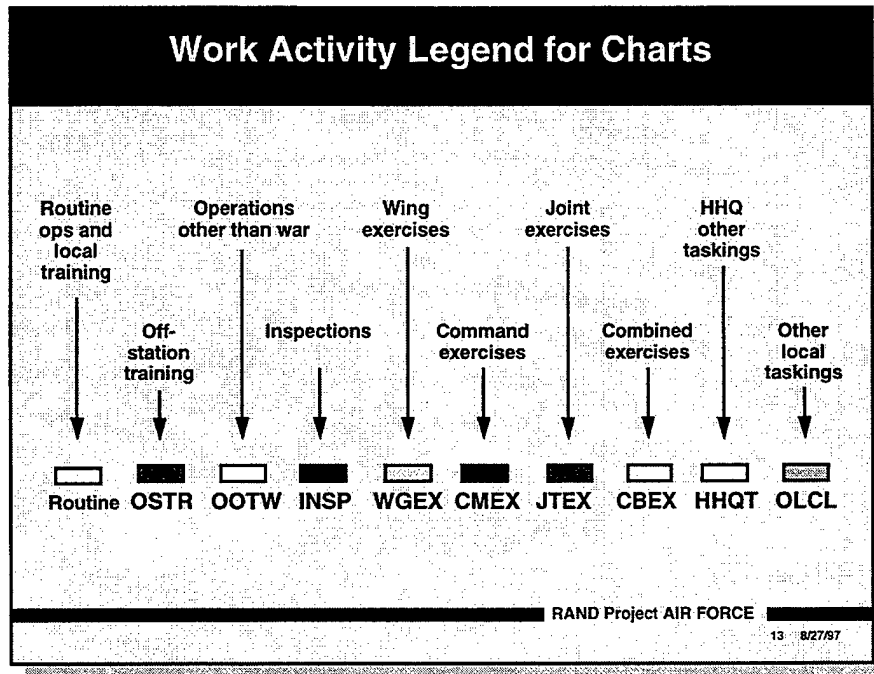
Since the more detailed set of ten categories of work activities will be used for most of the charts, we show it here before we review the results charts. More detailed explanations of the activities are in the survey instructions. (The questionnaire is included as Appendix C.)

Lessons From 3 Diverse Wings on Weeks Spent in Work Activities

Weeks spent annually on activities: actual vs. recommended

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14 8/27/97
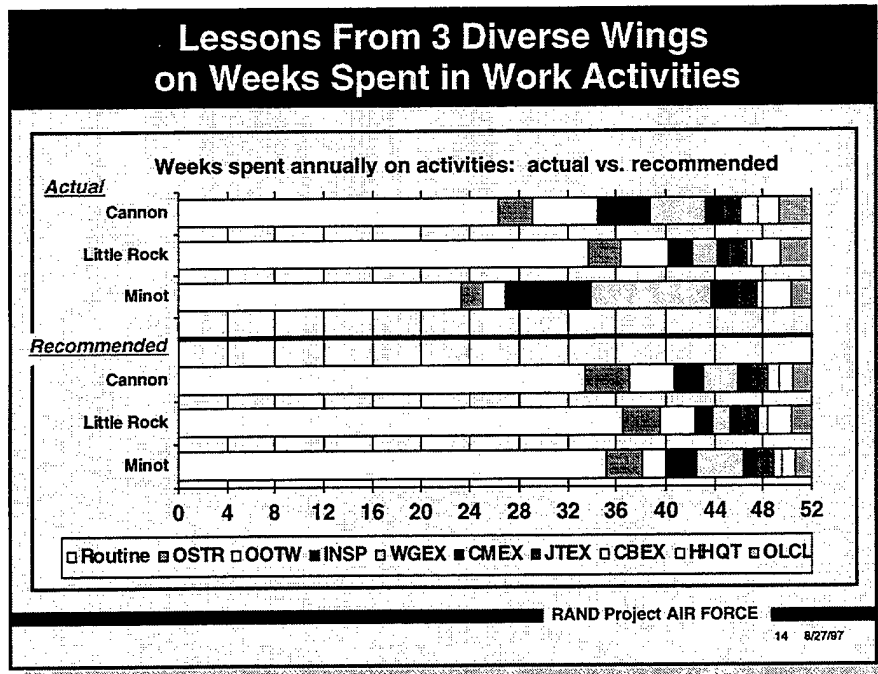
This display shows how wings *estimated* they spent their time over the last year. We did not measure time spent. (In fact, the absence of objective data about how time is spent was an important reason for conducting the survey.) Figures are in terms of an entire year--on a scale of 52 weeks with a vertical band every four weeks, or about every month. The shadings represent the ten work activities (supporting data shown below).

There were significant differences in how these three wings spent last year:

- Minot spent significantly more time on inspections and wing exercises than did the other wings, and significantly less time in routine peacetime operations and local training.

- Cannon spent significantly more time on OOTW than did Minot.

Despite their diversity, wings do not differ significantly in how they would *recommend* spending their time, shown in the bottom half of the display.

Estimated annual time (in weeks) for activities

	Routine	OSTR	OOTW	INSP	WGEX	CMEX	JTEX	CBEX	HHQT	OLCL	
Cannon (27FW)	26.3	2.8	5.4	4.3	4.5	1.4	1.5	1.4	1.7	2.7	52.0
Little Rock (314 AW)	33.7	2.6	3.8	2.0	2.1	0.9	1.5	0.4	2.4	2.6	52.0
Minot (5BW)	23.3	1.7	2.0	7.0	9.8	2.2	1.6	0.5	2.3	1.7	52.0

Recommended annual time (in weeks) for activities

	Routine	OSTR	OOTW	INSP	WGEX	CMEX	JTEX	CBEX	HHQT	OLCL	
Cannon (27FW)	33.4	3.6	3.6	2.4	2.9	1.2	1.2	1.0	1.1	1.5	52.0
Little Rock (314 AW)	36.6	2.9	2.8	1.5	1.5	0.9	1.4	0.8	1.9	1.7	52.0
Minot (5BW)	35.2	3.0	1.8	2.6	3.9	1.1	1.3	0.7	1.1	1.4	52.0

Next we look for differences among groups.

Groups' Actual and Recommended Time Distributions Differ

Weeks spent annually on activities: actual vs. recommended

☐ Routine ▧ OSTR ☐ OOTW ■ INSP ☐ WGEX ▨ CMEX ■ JTEX ☐ CBEX ☐ HHQT ☐ OLCL

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15 8/27/97
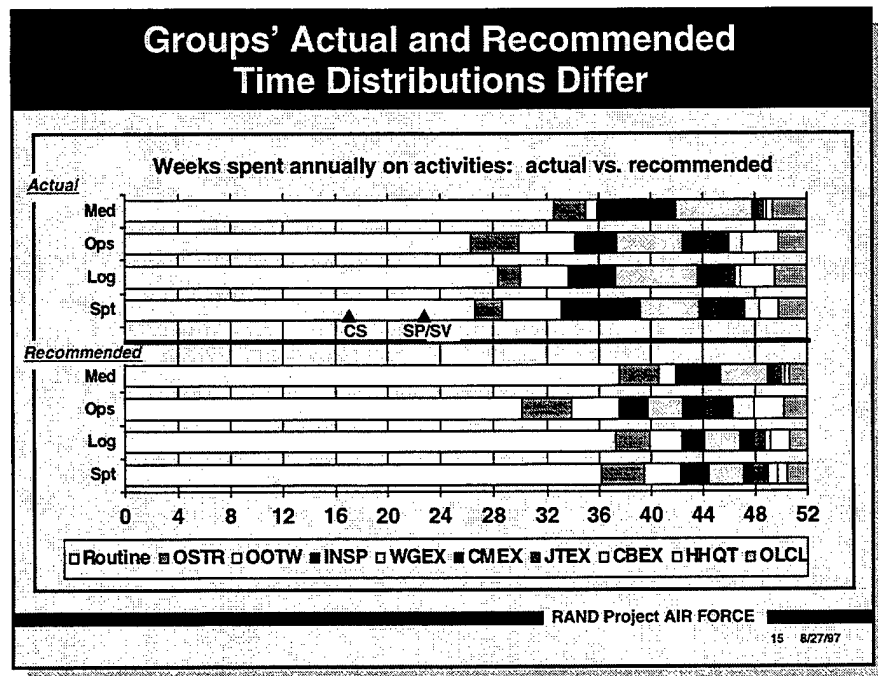
Responses from the medical group differ significantly from the other groups. They spend

- more time than operations and support groups on routine operations and training activities,

- less time than all other groups on nonwing exercises and on OOTW, and

- less time than operations and logistics groups on HHQ taskings.

All groups recommend increases in routine activities and decreases in wing exercises and inspections but do not agree to the same degree as the wings, on average.

- The support and medical groups differ significantly in recommended changes to OOTW. Support wants to decrease OOTW substantially and medical shows no significant change.

While the chart shows differences among the groups, there are also some significant differences among certain squadrons.

- Security police, services, and communications squadrons spend less time on routine operations and training than the average squadron--with communications squadrons having the most significant difference.

- Communications squadrons average 33% of time on routine operations and training, 33% on inspections and wing exercises combined, and 33% on all other activities combined. But they would recommend spending 60% on routine operations, 12% on inspections and wing exercises combined, and 28% of time on all other activities combined.

Estimated annual time (in weeks) for activities

	Routine	OSTR	OOTW	INSP	WGEX	CMEX	JTEX	CBEX	HHQT	OLCL	
Med	32.6	2.4	1.0	6.0	5.9	0.5	0.4	0.2	0.5	2.6	52.0
Ops	26.3	3.6	4.3	3.1	5.1	1.8	1.7	1.0	2.8	2.2	52.0
Log	28.4	1.7	3.6	3.7	6.3	2.0	0.8	0.5	2.6	2.5	52.0
Spt	36.7	2.0	4.5	6.0	4.6	0.9	2.5	1.2	1.4	2.2	52.0

Recommended annual time (in weeks) for activities

	Routine	OSTR	OOTW	INSP	WGEX	CMEX	JTEX	CBEX	HHQT	OLCL	
Med	37.5	3.1	1.3	3.5	3.6	0.4	0.5	0.3	0.4	1.3	52.0
Ops	30.2	3.8	3.7	2.2	2.7	1.7	2.2	1.6	2.3	1.8	52.0
Log	37.3	2.6	2.5	1.7	2.7	1.0	0.8	0.5	1.4	1.4	52.0
Spt	36.2	3.3	2.7	2.2	2.6	0.7	1.2	0.7	0.7	1.5	52.0

Inspections and Exercises Drive Significant Increases in Work Hours per Week

Work Hours per Week by Activity
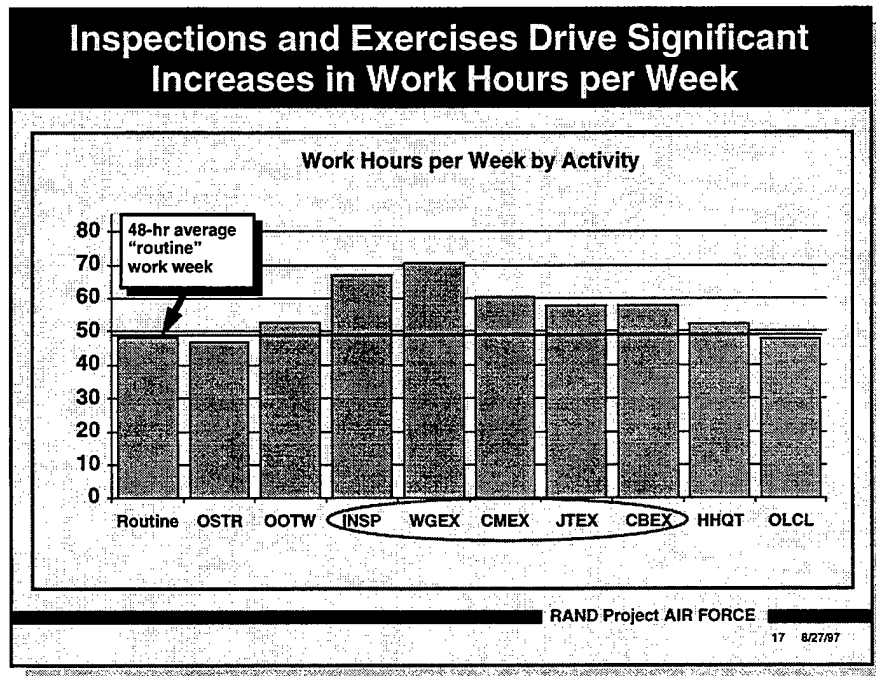
- The routine work week averages approximately 48 hours for all bases.

- Work weeks significantly exceed 48 hours during inspections and all exercises at all bases.

Work hours per week for wings and activities

	Cannon	Little Rock	Minot	Average
Routine	48.7	49.1	47.0	48.3
OSTR	48.8	45.5	45.5	46.7
OOTW	54.6	53.0	49.5	52.6
INSP	57.4	62.7	82.1	66.8
WGEX	62.1	67.3	81.7	70.7
CMEX	51.4	57.8	76.2	60.5
JTEX	58.9	59.8	54.7	57.9
CBEX	55.3	61.0	58.1	57.7
HHQT	52.5	51.4	53.3	52.3
OLCL	50.8	45.6	47.8	48.1

Peak Work Hours Very High at Minot

Work Hours per Week by Activity
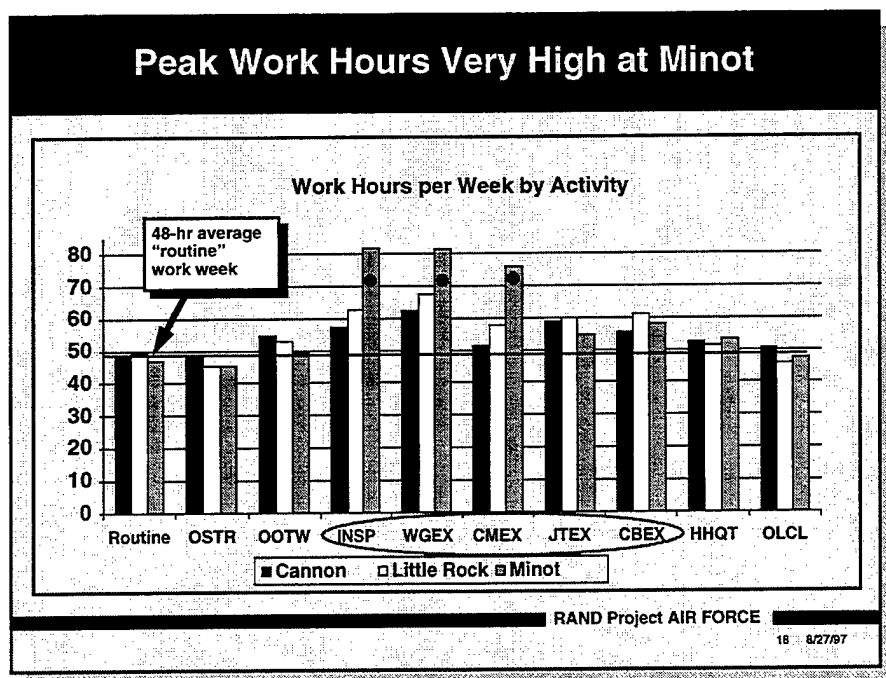
The increases in work week length are substantially larger at Minot for inspections, wing exercises, and command exercises (adding 30-35 hours versus 5-15 hours at the other bases). The data are weighted to include both TDY and at-home work weeks. Thus, the chart provides an overall picture of average work weeks for the wings during different activities. For those TDY during OOTW, the average work week is approximately 20 hours longer.

Two differences stand out between groups:

- Medical groups' increases for inspections and wing exercises, while still significant, are not nearly as large as for other groups.

- The 80-hour work week for Minot during inspections, wing exercises, and command exercises increases to 100-hour weeks in the security police squadron at Minot.[1]

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[1] If we exclude Minot security police, Minot's average of 81 hours per week for INSP only drops by 3, its average of 82 for WGEX drops by 3, and its average of 77 for CMEX drops by 5.

Estimated Time Spent on Activities Adjusted for Hours per Week
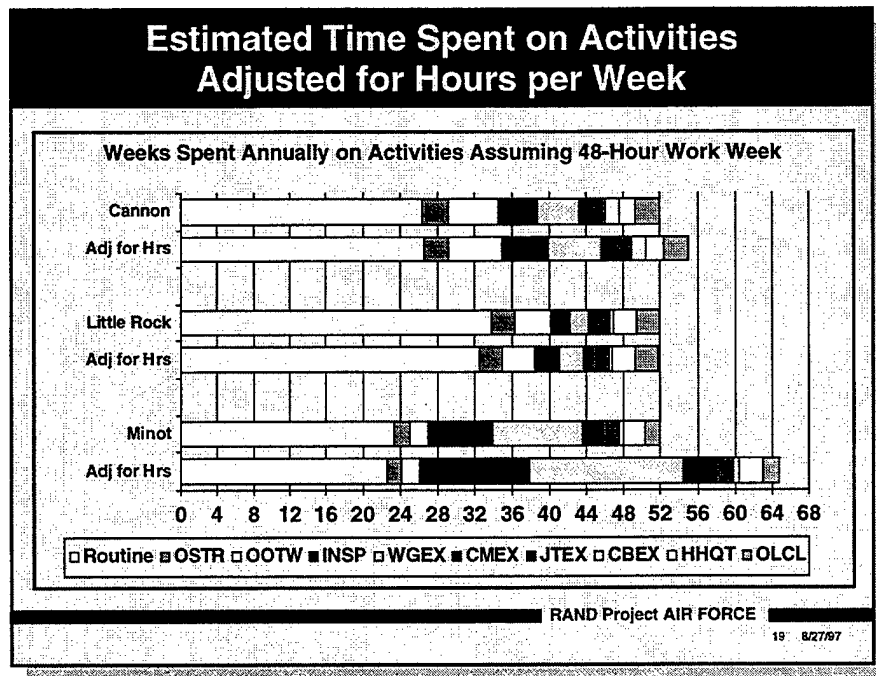
Earlier we showed weeks for each activity over the last year to get a sense of proportion, but a 50-hour week and an 80-hour week both appeared as one week on the scale. Here we adjust the weeks in light of the hours from the previous chart and use "work-week-equivalents," assuming an average 48-hour work week.

If Minot had to do all its activities for the last 12 months, using only 48-hour work weeks, it would take 65 rather than 52 weeks.

Work hours per week for wings and activities, adjusted to 48-hour work weeks

	Cannon	Little Rock	Minot
Routine	26.5	32.4	22.5
OSTR	2.6	2.5	1.6
OOTW	5.7	3.7	2.0
INSP	5.1	2.5	11.8
WGEX	5.8	2.7	16.6
CMEX	1.6	1.0	3.5
JTEX	1.7	1.8	1.9
CBEX	1.6	0.4	0.6
HHQT	1.9	2.5	2.6
OLCL	2.6	2.5	1.8
Total	55.0	51.8	64.7

Work Intensity Highest During Operations Other Than War, Inspections, and Wing Exercises

Intensity Level of Work - By Activity/By Base
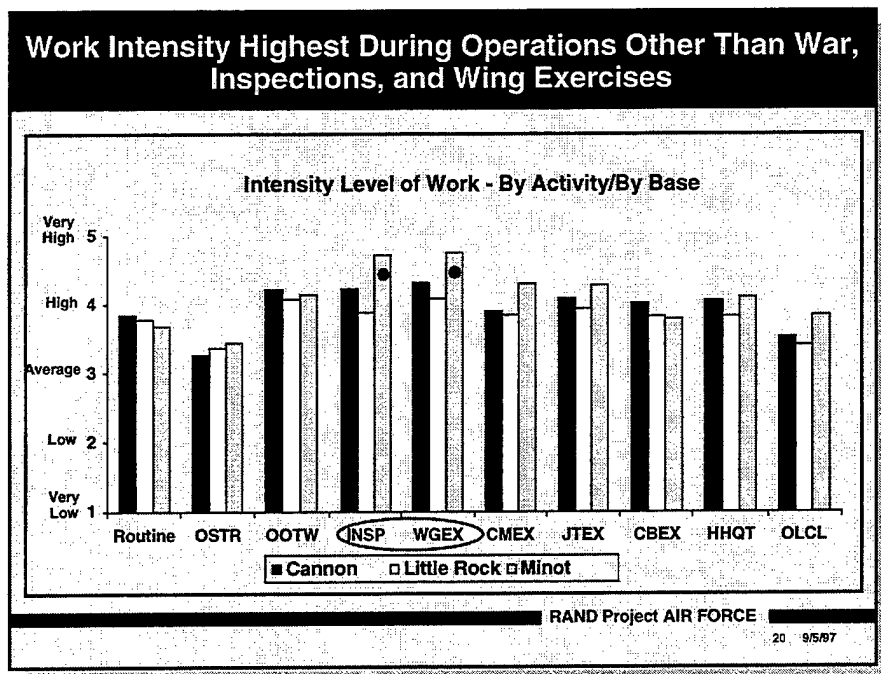
More than half of the commanders--from all bases and groups--stated that work intensity in their units was high (a rating of 4 or 5) no matter what the activity, resulting in the averages shown. There were two exceptions:

- More than half said off-station training had average work intensity.

- More than half said wing exercises had very high intensity.

The most-intense work appears to be for inspections and wing exercises (especially at Minot).

- 81% labeled wing exercises as very high intensity at Minot, 42% at the other two bases.

- 76% labeled inspections as very high intensity at Minot, 38% at the other two bases.

	Cannon	Little Rock	Minot	Average
Routine	3.9	3.8	3.7	3.8
OSTR	3.3	3.4	3.5	3.4
OOTW	4.2	4.1	4.1	4.1
INSP	4.2	3.9	4.7	4.3
WGEX	4.3	4.1	4.8	4.4
CMEX	3.9	3.9	4.3	4.0
JTEX	4.1	3.9	4.3	4.1
CBEX	4.0	3.8	3.8	3.9
HHQT	4.1	3.8	4.1	4.0
OLCL	3.5	3.4	3.8	3.6

Time and Intensity Comments

"We have reached and far surpassed the point of an efficient organization. We are now racing down the other side of the Bell chart, becoming more inefficient as more cuts in manpower and technical expertise occur."

"Over time we have acquired more equipment than personnel. Now we find ourselves working harder too and longer hours to keep our unit ready for the mission."

"Our people have been working 10-12 hour days, 6 days a week, trying to keep up. Weekend duty was supposed to be 1-2 hours/day, but has become 8-10 hour/days. We don't have time to catch up and do proper maintenance."

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21   8/27/97

Here are some respondents' written comments that convey the tone of many commanders concerning the distribution and intensity of their units' work (comments in order presented in the chart above are from Cannon AFB, Little Rock AFB, and Minot AFB).

Nonroutine activities, especially inspections and exercises, should be expected to increase stress because they are designed to tax people and systems to their capacity--in part precisely to observe performance under such conditions. In theory, this can be very beneficial. A closely related question is whether these activities are viewed as improving readiness. (We will get to that momentarily.) At this point, we merely point out that survey respondents apparently believe these activities occur too often and/or consume too much time.

After examining how 8AF personnel spent their time, we reviewed how they perceive that the various activities affect readiness.

Readiness Responses

List all mission areas
- **Rate relative importance for peacetime (1-5)**
- **Rate relative importance for wartime (1-5)**

The survey question:

How does each of the ten activities affect unit and individual preparedness to perform in mission area listed?

Rating scale for survey responses

1 = Serious degradation   2 = Some degradation

3 = Neutral   4 = Positive improvement   5 = Great improvement

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22   8/27/97

The survey described preparedness as the ability to perform the mission effectively, efficiently, and without delay.
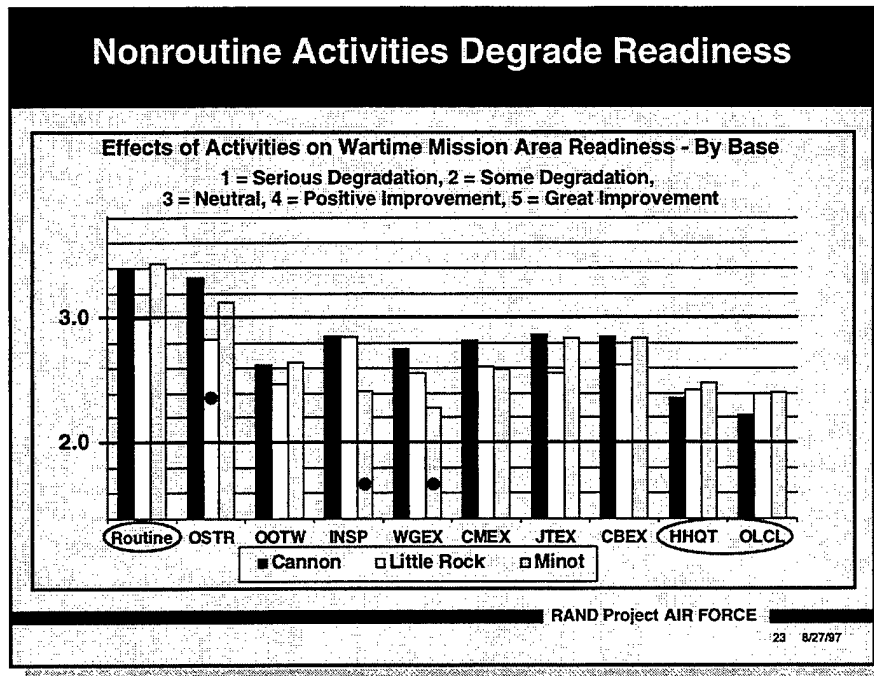
This chart shows an expanded view of a portion of the 1-to-5 scale, making it easier to see the differences.

Routine operations and training (Routine) rate positively at Cannon and Minot, neutrally at Little Rock. Off-station training (OSTR) rates positively at Cannon, neutrally at Minot, and negatively at Little Rock. The remaining eight activities rate significantly more negatively at all bases.

- Inspections (INSP) and wing exercises (WGEX) rate more negatively at Minot than at the other two bases.

- HHQ other taskings (HHQT) and other local taskings (OLCL) clearly rate most negatively at Cannon and among the most negatively at Little Rock and Minot.
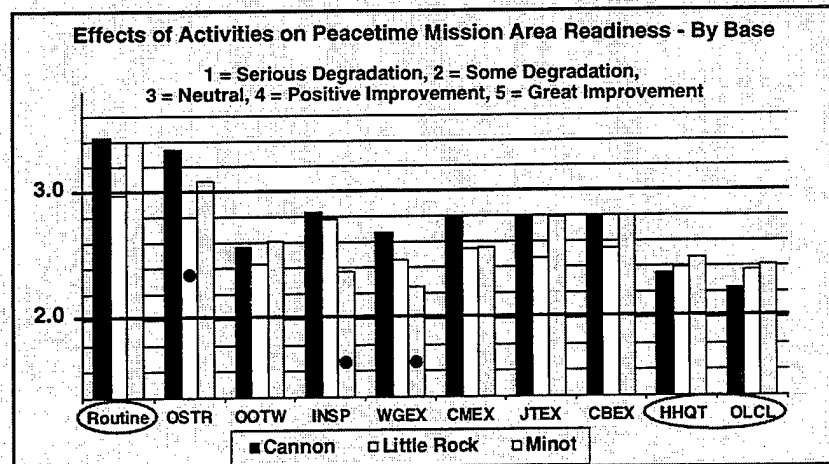
The patterns are generally the same for peacetime missions as for wartime missions. (Note that the missions rated most important for peacetime and wartime are somewhat different; the correlation between missions' importance ratings in the two settings was about 0.3. But since the activities were rated about the same--in terms of how they affect readiness--across the various activities, this display and the one for wartime missions look very similar.)

	Cannon	Little Rock	Minot
Routine	3.4	3.0	3.4
OSTR	3.3	2.8	3.1
OOTW	2.6	2.4	2.6
INSP	2.8	2.8	2.4
WGEX	2.7	2.5	2.3
CMEX	2.8	2.5	2.6
JTEX	2.8	2.5	2.8
CBEX	2.8	2.5	2.8
HHQT	2.3	2.4	2.5
OLCL	2.2	2.4	2.4

Med Readiness Most Impaired by Nonroutine Activities
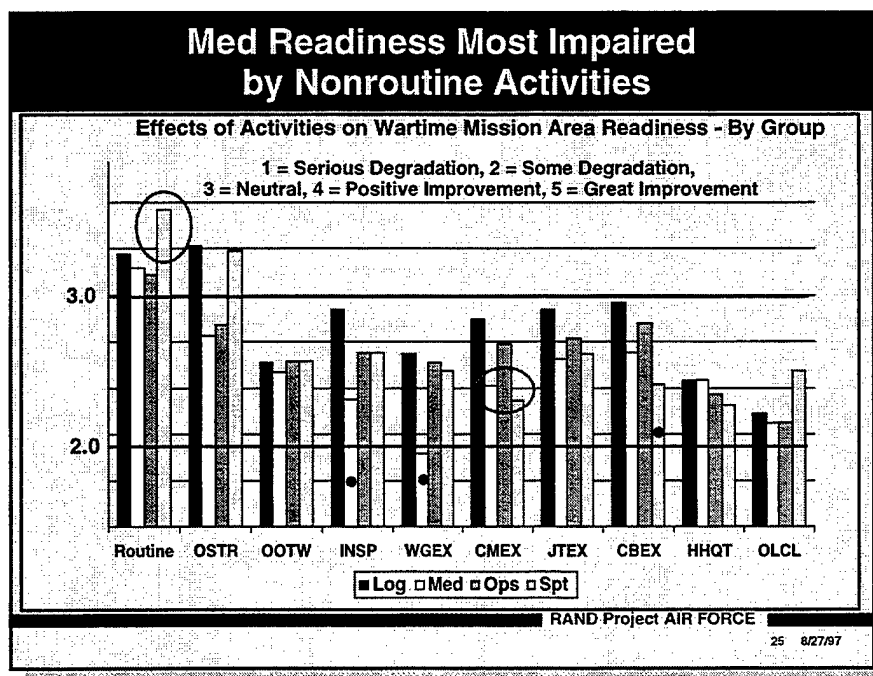
All four groups perceive degradation in mission readiness for nonroutine activities, but medical groups perceive significantly more degradation. The averages for inspections and wing exercises are significantly lower for medical groups than for others, and the average for command exercises is lower in medical and support groups than in logistics and operations groups. The routine operations and training activity rates significantly higher for support groups, and combined exercises rate significantly lower for support groups.

	Log	Med	Ops	Spt
Routine	3.2	3.2	3.1	3.5
OSTR	3.3	2.8	2.8	3.3
OOTW	2.6	2.5	2.6	2.6
INSP	2.9	2.4	2.7	2.7
WGEX	2.6	2.0	2.6	2.5
CMEX	2.9	2.5	2.7	2.4
JTEX	2.9	2.6	2.7	2.6
CBEX	3.0	2.7	2.8	2.5
HHQT	2.5	2.5	2.4	2.3
OLCL	2.3	2.2	2.2	2.5

For the most part, the groups' patterns for peacetime missions are the same.

Readiness Comments

"Our mission is combat readiness to employ bombers in combat. Flag exercises, JTFEX's, Global Power, etc., contribute to that. ORIs and OREs do not. The entire ORI/ORE system fails to assess/exercise our aerial warfighting ability. Certainly it exercises/ assesses our ability to generate, but no measure of bombs on target."

"Although we do SEAD during operations other than war, our high ops tempo drives severe continuity problems in our squadron, degrading our ability to train for SEAD operations for a major war scenario."

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26   8/27/97

This chart and the next show representative survey comments about mission readiness, mainly addressing the effects of inspections, certain exercises, and OPTEMPO. The comments from Minot AFB (first comment) and Cannon AFB (second comment) were especially strongly worded.

(SEAD is suppression of enemy air defenses.)

Readiness Comments

"... all opportunities to practice our wartime skills have a positive effect on our wartime readiness. *However,* the frequency of inspections and exercises does not allow us enough time to identify mistakes, learn from them, and then develop and implement corrective actions! We end up making the same mistakes over and over! Not so serious in practice, but *absolutely catastrophic in war!*"

"Routine peacetime operations and wing exercises should complement our mission readiness. Local taskings and inspection preparation impact our ability to properly train for war."

"Inspections should come in and look, not require briefings and presentations from unit. Exercises need to replicate real world (joint and combined)."

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27   8/27/97

The first comment on this chart is from Minot AFB, and the next two are from Little Rock AFB.

Professional Growth Responses

- **The survey questions:**

  How do the work activities affect unit members' ...

  - **... opportunities for attending PME or academic courses?**
  - **... opportunities to complete formal upgrade training?**
  - **... opportunities for self-study?**
  - **... opportunities for career-broadening?**
  - **... opportunities for community involvement?**

Response scale for survey responses

1 = Very negative	*2 = Negative*	*3 = Neutral*
4 = Positive		*5 = Very positive*

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28   8/27/97

Now on to the next survey area: professional growth. We analyzed each of these questions separately, but because the correlation is very high, we combine the items into a single scale.

(PME is professional military education.)

Nonroutine Activities Inhibit Professional Growth

Effects of Activities on Professional Growth - By Base
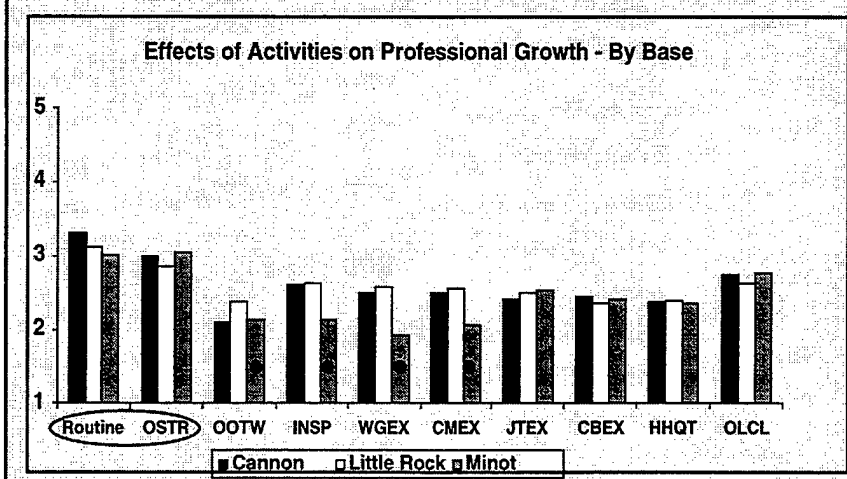
Routine operations and training and off-base training rate as neutral to positive in their effects on professional growth at every base. Routine clearly rates positive at Cannon. At Little Rock, everything else rates as moderately detrimental. Cannon rates everything else as moderately detrimental, except that OOTW rates as most detrimental. Minot rates OOTW, inspections, wing exercises, and command exercises as most detrimental. (Minot's OOTW workload is apparently borne in the support areas, not in bomber missions.)

	Cannon	Little Rock	Minot	Average
Routine	3.3	3.1	3.0	3.2
OSTR	3.0	2.9	3.1	3.0
OOTW	2.1	2.4	2.1	2.2
INSP	2.6	2.6	2.1	2.5
WGEX	2.5	2.6	1.9	2.3
CMEX	2.5	2.6	2.1	2.4
JTEX	2.4	2.5	2.5	2.5
CBEX	2.5	2.4	2.4	2.4
HHQT	2.4	2.4	2.4	2.4
OLCL	2.8	2.6	2.7	2.7

Professional Growth Comments

"Many personnel management tasks simply don't get done in the 12-14 hr days; 6-7 day weeks required to keep the operation going to nuclear standards...you just can't get there from here!"

"Prep and training time for deployment and the extended deployment time (90-175 days) eliminates potential for college classes/PME attendance. "

"11-14 hour days make it next to impossible to do SSS or read material on leadership, quality improvements, etc."

"Work is so intense, we leave work drained. Then, with family to face, who wants or has energy to attend night classes (note that we're civilians and work 8 hrs/day)."

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30   8/27/97

Again, here are some representative survey comments on the subject of professional growth. The first is from Minot AFB, the second and third are from Cannon AFB, and the fourth is from Little Rock AFB.

(SSS is Senior Service School.)

Personal and Family Life Responses

- The survey questions:

  How do the work activities affect unit members'...

  ... ability to plan and take annual leave

  ... ability to attend family events (births, graduations, anniversaries, etc.)

  ... health (stress, drinking, smoking, etc.)

  ... family relationships (separations, divorce, incidents of abuse, etc.)

Scale for survey responses

  1 = Very negative   2 = Negative   3 = Neutral

  4 = Positive   5 = Very positive

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31   8/27/97

We also analyzed separately these questions in the next survey area: personal and family life. Since these responses too have very high correlation, we combine the items into a single scale for this presentation.

Several Activities Have Significant Negative Effects on Personal/Family Life

Effects of Activities on Personal & Family Life - By Base

Routine OSTR OOTW INSP WGEX CMEX JTEX CBEX HHQT OLCL

■ Cannon   □ Little Rock ▨ Minot
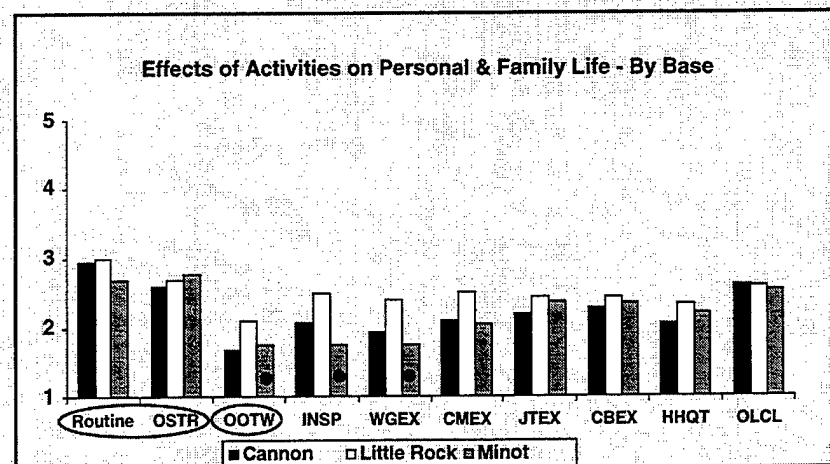
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32 9/5/97

Routine activities and off-base training have the least negative effects on family life. Routine activities are not rated negatively at Little Rock or Cannon, and off-station training rates only slightly negative. Routine and off-station activities rate as somewhat negative at Minot, but the least negative among all activities. "Peeling the onion further" to group level at an individual base, Little Rock's operations group rates off-station training as significantly negative.

On average, operations other than war are rated as having the most negative effects of all ten activities. They're the most negative of all activities for Little Rock and Cannon. Minot rates inspections and wing exercises as negatively as operations other than war.

Security police squadrons rate operations other than war, inspections, and wing exercises very negatively. If security police responses were removed, operations other than war, inspections, and wing exercises would still rate worst at Minot, without significantly changing the average.

	Cannon	Little Rock	Minot	Average
Routine	3.0	3.0	2.7	2.9
OSTR	2.6	2.7	2.8	2.7
OOTW	1.7	2.1	1.8	1.8
INSP	2.1	2.5	1.8	2.1
WGEX	1.9	2.4	1.7	2.0
CMEX	2.1	2.5	2.1	2.2
JTEX	2.2	2.4	2.4	2.3
CBEX	2.3	2.4	2.4	2.3
HHQT	2.0	2.3	2.2	2.2
OLCL	2.6	2.6	2.5	2.6

Personal and Family Life Comments

"In the last six months, a total of seven people have filed and been granted divorces. In a squadron of 65 people, this is really bad. Everyone has been either TDY or caught up in the High Ops Tempo area."

"Younger troops have a lot of problems ensuring their families are taken care of. Now, a lot are getting out because they know more deployments are coming. "

"We do our best if a wife is downloading to make sure the Dad can be there. But graduations, anniversaries, sorry, have to draw the line."

"Taking leave is a no win proposition. It's difficult to find a time to take leave and the work just piles up while an individual is on leave, creating stress upon return to duty."

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33   8/27/97

As before, here are a few of the respondents' written comments regarding personal and family life. The first is from Minot AFB, the second and third are from Cannon AFB, and the fourth is from Little Rock AFB.

Personal and Family Life Comments

"The outrageous work hours in terms of long-term effects definitely stress family life and lead to drinking to relax, abuse, depression, etc."

"Relationships take the biggest hit. In EF-111 squadron we had the highest divorce rate in ACC at one time. It sucked to watch wives drink themselves to partial liver failure and then be bitter at the husband, Air Force and life. It didn't make for a great family life."

"Tempo and manning has made "planning" difficult because of short notice taskings and inability to handle flex in workload. Manpower is biggest driver here!"

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34   8/27/97

And here are three more written comments regarding personal and family life. Comments in order are from Minot AFB, Cannon AFB, and Little Rock AFB.

As noted earlier, certain activities such as exercises and inspections should be expected to cause stress. Our survey data suggest that current stress levels are too high, but do not allow us to infer whether they are higher now than in the past.

Summary of 8AF and Wing Patterns

All wings and groups recommend
- **More time for routine operations and training**
- **Less time on inspections and wing exercises**

Unique to one wing
- **Minot's inspections and wing exercises have significantly more negative effects**

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35 8/27/97

Looking across the three wings, there's clear consensus in recommending that more time be spent on routine operations and training and less on inspections and wing exercises. Minot's responses rated inspections and wing exercises even lower than did Cannon's and Little Rock's.

Summary of Specific Group Patterns

Med Group has "stronger ties" to routine
- Have most time in routine activities, yet desire more
- Increase in work hours, while significant for inspections and wing exercises, is not as great as the others
- Significantly more degradation from nonroutine activities

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36 8/27/97

There seems to be a fundamental difference in the way medical groups view nonroutine activities.

Summary of Specific Squadron Patterns

- **Security Police Squadrons** suffer very negative effects on personal/family life from operations other than war, inspections, and wing exercises

- **Security Police, Services,** and **Communications Squadrons** have significantly less time for routine than any other squadrons, with Communications Squadron as the extreme:
  - CS reports 33% of time spent on routine and 33% on inspections and wing exercises
  - CS would prefer spending 60% on routine and 12% on inspections and wing exercises

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37   8/27/97

And a few differences are also clear at the squadron level.

While we may draw other conclusions from the survey data, it is clear that our respondents believe something is "broken" in the way inspections and exercises are planned and conducted. The burden is apparently considerably larger than commanders believe is worthwhile, and the effects seem to be more negative than positive— even the effect on readiness, which those activities should be designed to enhance.

Inspections and exercises apparently lack relevance and may have failed to keep pace with changes in the AF in the face of transformation in threat, technology, information, operational art, management, and fiscal climate. However, the AF "owns" most of its inspections and exercises, so the means should be available to relieve substantial portions of the stress from these activities and to make them more beneficial.

The degree to which these three diverse wings and their constituent groups and squadrons seem to agree about these views suggests that the problem may be widespread across 8AF and perhaps the entire Air Force.

Blue Ribbon Commission on Organizational Evaluations & Awards, 4-Star Pilot Retention Meeting

- Recommendations on evaluation and inspections:
  - Limit compliance inspections to critical areas only
  - Increase the use of sampling
  - Discourage and prevent significant preparation
  - "Cap" time spent inspecting, assessing, and evaluating

- USAF CV 28 Apr 97 message: "... two recommendations, establishing an evaluation 'cap' and optimizing ORIs, require further study before executing..."

- CSAF 9 May 97 message: "SAF/IG will examine the options for conducting ORIs with deployments, as well as evaluating only AFMETL taskings, and establish a one year moratorium on ORIs while the process is reengineered."

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39 8/27/97

Others have reached similar conclusions about inspections/evaluations. The CSAF created a Blue Ribbon Commission on Organizational Evaluations and Awards in April 1996 to conduct an end-to-end review of assessment and awards programs, addressing rank-and-file discontent with Air Force inspection and assessment policies. (The report was released in February 1997.) The Commission made recommendations in seven general areas:

- HQ USAF should develop a strategic plan, setting prioritized goals and objectives for the entire AF.

- Quality Air Force practices should be made simple.

- Commanders at all levels should develop and issue standards for performance.

- AF should review organizational awards; they are currently a patchwork of different standards and selection processes and require significant preparation and evaluation time at the unit level.

- AF should conduct a concentrated effort to develop leading-edge metrics.

- AF should continue ORIs, but with a focus strictly on mission capability.

- Cap the time spent in visits to field units for inspection, assessment, and evaluation. Goals: reduce Inspector General (IG) man-days 25% in FY98, 50% in FY99.

The Vice Chief's 28 April message to all Major Command (MAJCOM) commanders called for aggressive implementation of recommendations in the first five areas and for further study on ORI changes and capping IG man-days.

The Chief's 9 May message to all MAJCOM commanders announced related actions resulting from a 4-star conference addressing pilot retention. The Secretary of the Air Force (SAF)/IG will examine the options for conducting ORIs when deployments occur, as well as evaluating only Air Force Mission Essential Task List (AFMETL) taskings and establishing a one-year moratorium on ORIs while the process is reengineered.

Since our findings are so closely related, we should share them with those chartered to reengineer ORI processes.

Overview

- Maintaining readiness and quality of life for Air Force people -- an AF-wide problem

- RAND's approach complements ongoing efforts

- Lessons from three 8AF wings

⇒ • Actions that will help the Air Force

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41   8/27/97

Finally, we turn to several actions that we think would benefit the Air Force.

Actions That Will Help the Air Force

- **Fix inspections and exercises**
  - **Improve focus to increase mission relevance**
  - **Decrease time to reduce negative effects on readiness and quality of life**

- **Examine problems specific to Med groups and SP and CS squadrons**

- **Ensure the AF integrates, with a "global perspective," the results of various study groups**

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42   8/27/97

Our study indicates that inspections should be focused to contribute more directly to readiness and restructured to consume less time. Similar steps also seem warranted for exercises.

Special attention should go to the unique problems faced by medical groups and security police and communications squadrons.

- A review of medical inspection and exercise objectives for all services may find ways to improve focus on peacetime and wartime medical care missions.

- A review of security police missions and manpower requirements is warranted in the face of extreme work hours and very negative effects on personal/family life from nonroutine activities.

- A review of communication squadron missions should highlight why personnel spend two-thirds of their time on nonroutine activities compared to one-half in most other AF squadrons.

Several agencies and teams are examining related topics. The results of these efforts should be integrated, and actions to address the identified problems should be coordinated. Achieving a "global" view of the problem seems vital to success.

Synchronize Efforts to Improve Overall AF Performance

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43   8/27/97
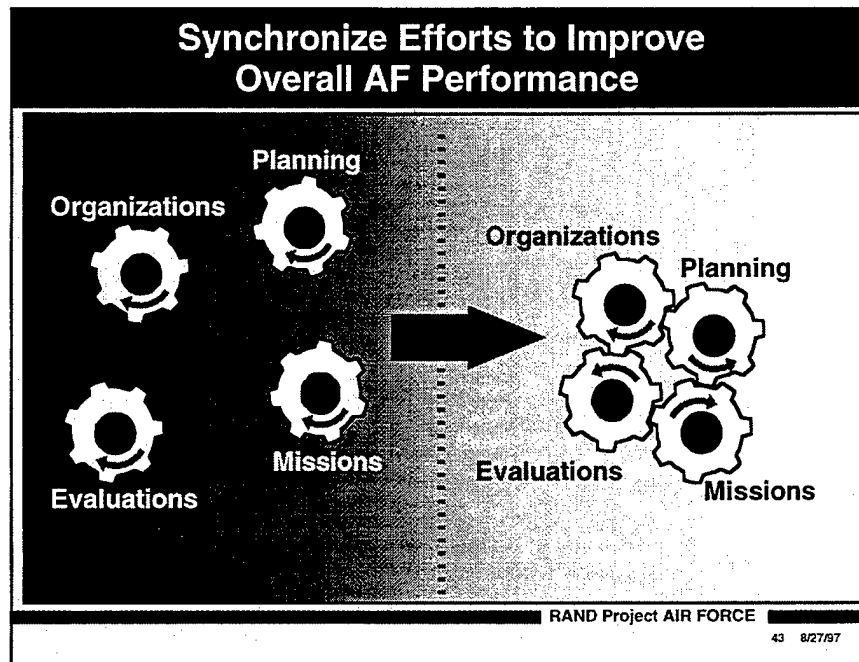
During the post-cold war period, the AF has worked hard to improve strategic planning, to clearly define missions, to reorganize where necessary, and to exercise and evaluate in a manner that enhances its capability to fight and train.

Current examples of ongoing AF efforts:

- Planning -- The 1996 CORONA fall conference concentrated on long-range planning and associated efforts to institutionalize use of the strategic plan

- Missions -- Consideration of bombers in Air Expeditionary Force employment

- Organizations -- Study of Numbered Air Force (NAF) reorganization

- Evaluations -- SAF/IG efforts to reengineer operational readiness inspections.

This chart shows a spectrum where one end represents unsynchronized AF efforts and the other represents perfect synchronization. We are concerned that improving the focus of inspections and exercises and reducing the time devoted to them without considering other AF efforts involving planning, missions, and organizations may yield only marginal improvements in overall Air Force performance.

Appendix A

TECHNICAL NOTES

Our analyses of the 8AF workload survey data examined the perceived effects of ten activities (i.e., routine operations and local training, off-station training, operations other than war, inspections, wing exercises, command exercises, combined exercises, joint exercises, higher headquarters' taskings, and local taskings) on four areas:[1]

- preparedness to perform specific missions,
- time and intensity of work,
- professional growth and development, and
- personal and family life.

Furthermore, we were interested in assessing whether there were differences or similarities in these effects within and between wings (i.e., 5BW, 314AW, 27FW), groups (i.e., operations, logistics, support, and medical), and squadrons (e.g., civil engineering, security police, medical operations squadron, fighter squadron, etc.). We also surveyed members of the wing staff (e.g., chaplains, judge advocate generals, etc.), but they represent such disparate missions that we deemed it inappropriate to consider them as one group, and our sample contained too few in any one mission area to permit making meaningful statements regarding their activities. As a result, wing staff are not included in our analyses.

SAMPLE

We surveyed 474 group, squadron, and flight commanders in three 8AF wings (5BW, 314AW, 27FW). This sample represented approximately 80 percent of the organizational units within these three wings. Respondents were asked to speak for themselves and those within their immediate span of control. For example, group and squadron commanders were asked to reflect themselves and the members of their immediate staffs. Flight

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[1] The survey also included several questions regarding the effects of these activities on resources. Only one of these questions, regarding the intensity of work, is included in the analyses reported here.

leaders were asked to speak for themselves and the members of their flights.

DEPENDENT VARIABLES

Preparedness to Perform Specific Missions

Respondents generated a list of missions relevant to their organization and level. They drew from mission lists we gleaned from designed operational capability (DOC) statements, unit type codes (UTCs), and AFI 38-101, *Air Force Organization*. Respondents rated each mission for wartime and peacetime importance, and then rated the effect of each of the ten activities listed at the beginning of this appendix on preparedness to perform each mission.

Differences in the number and content of the missions across respondents precluded analyses at the level of individual missions. Instead, we constructed 20 dependent variables representing the average weighted effect of activities on mission preparedness. Ten variables represent the effects of activities on wartime-weighted mission preparedness, and ten represent the effects on peacetime-weighted mission preparedness. These variables were computed as follows:

For respondents i=1, 2, ..., N; activities j=1, 2, ..., 10; and missions k=1, 2, ..., K_i (i.e., the number of missions listed by respondent i),

$$y_{ij} = \sum_{k=1}^{K_i} \left(AE_{jk} * RW_{ik} \right)$$

where

y_{ij} is respondent i's weighted-average rating that reflects the effect of activity j on missions 1 through K_i,

AE_{jk} is the rating for the effect of activity j on preparedness to perform mission k, and

RW_{ik} is respondent i's relative importance weight for mission k, defined as:

$$RW_{ik} = WI_{ik} \Big/ \sum_{\hat{k}=1}^{K_i} WI_{i\hat{k}}$$

where

WI_{ik} is the importance rating respondent i gives to mission k (which can differ for peacetime versus wartime).

Time and Intensity of Work

Respondents also estimated the percentage of time that their organizational unit had spent on each of the ten activities during the past 12 months, and they recommended the percentage of time that *should* be spent on each activity. A table converting weeks, months, and days into percentages of time was provided to guide them.

Intensity of work was measured by a single item, "What is the level of intensity of work by unit members when engaged in the following activities?"

Professional Growth and Development

Effects on professional growth and development were measured using five items:

How do the ten activities affect unit members' opportunities

- for attending PME or academic courses?

- to complete formal upgrade training steps?

- for self study?

- for career-broadening events?

- for community involvement?

Responses to these items on the five-point response scale were highly correlated (coefficient alpha reliability=.83). Consequently, rather than analyze individual items, we used each individual's average response to these five items in our analyses.

Personal and Family Life

Effects on personal and family life were measured using four items:

How do the ten activities affect unit members'

- ability to plan and take their annual leave?

- ability to attend family events (births, graduations, anniversaries, etc.)?

- health (stress, drinking, smoking, etc.)?

- family relationships (separations, incidents of abuse, etc.)?

Responses to these items were also highly correlated (coefficient alpha reliability=.86), so we again used each individual's average response to these four items in our analyses.

ANALYSES

Data were weighted to reflect the authorized manning for the organizational unit represented by the respondent. For example, if one flight leader had a 60-person flight and another a 5-person flight, the responses of the former were weighted 12 times as much as those of the latter.

For each dependent variable we first used analysis of variance (ANOVA) to estimate main and interaction effects for wing, group, and organizational level of respondents (i.e., group, squadron, or flight) to identify effects for further examination. For those ANOVA terms that were significant, we used post hoc pairwise comparisons among means to identify significant differences. Tables A.1 through A.8 display the means and standard deviations that lie at the root of our analyses. We used a Bonferroni adjustment to correct alpha levels for these multiple paired comparisons (see R. G. Miller, *Simultaneous Statistical Inference*, 2d ed., New York: Springer-Verlag, 1981).

Table A.1

Means and Standard Deviations for Recommended
Percent of Time to be Spent on Each Activity

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	72.78	52.97	55.30	67.57	64.25	74.82	82.80	64.90	67.06	70.36
	S.D.	10.26	33.09	16.41	12.86	17.22	16.08	14.05	25.08	19.98	21.02
Off-Station	Mean	5.23	13.38	7.62	6.72	6.95	4.47	4.12	7.07	5.80	5.65
	S.D.	3.24	10.44	5.77	2.92	5.22	4.41	5.69	6.14	3.02	5.07
Inspections	Mean	3.27	11.62	4.81	4.22	4.58	2.86	2.33	2.97	2.73	2.82
	S.D.	4.11	11.11	3.30	2.76	4.75	2.35	3.34	2.34	1.96	2.36
OOTW	Mean	4.97	2.57	9.76	7.17	7.00	5.06	1.50	5.68	7.06	5.38
	S.D.	5.21	5.36	11.05	5.61	8.05	5.82	2.75	7.20	7.19	6.56
Wing Ex.	Mean	4.54	12.49	5.72	4.98	5.57	2.61	3.49	2.38	3.78	2.88
	S.D.	3.04	10.76	3.56	3.81	4.65	3.33	3.55	2.43	3.85	3.22
Cmd Ex.	Mean	2.01	0.13	3.82	1.01	2.24	1.40	0.68	2.03	2.34	1.76
	S.D.	1.69	0.42	4.01	1.64	2.93	2.26	1.00	2.29	2.55	2.29
Jnt Ex.	Mean	1.33	0.61	3.49	2.62	2.34	1.60	1.14	3.95	2.64	2.62
	S.D.	1.68	1.34	2.84	2.27	2.46	2.25	1.55	9.06	2.91	5.77
Cmb Ex.	Mean	1.25	0.12	2.98	1.98	1.95	0.89	0.68	2.26	1.60	1.51
	S.D.	1.37	0.49	2.81	2.31	2.32	1.51	1.13	2.60	2.33	2.18
HHQ Task	Mean	1.94	0.92	3.42	1.06	2.14	3.87	0.78	5.12	2.58	3.72
	S.D.	1.84	2.09	4.13	2.12	3.03	4.50	2.80	7.33	3.07	5.45
Local Task	Mean	2.69	4.39	3.08	2.67	2.92	2.30	2.56	3.90	4.27	3.33
	S.D.	2.38	3.52	5.35	5.42	4.45	2.63	8.33	6.17	11.17	7.08
Overall	Mean	10.00	9.92	10.00	10.00	9.99	9.99	10.01	10.03	9.99	10.00
	S.D.	21.43	19.31	16.87	20.01	19.46	22.49	25.01	20.68	20.67	21.71

		Minot AFB					Group Averages Three Bases				Activity
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	67.45	75.59	49.80	72.65	67.66	71.77	72.08	57.99	69.61	67.23
	S.D.	15.20	8.64	15.97	12.22	15.77	14.03	22.32	20.79	14.76	18.21
Off-Station	Mean	5.24	2.70	7.21	6.40	5.70	5.00	5.92	7.34	6.36	6.15
	S.D.	4.55	3.73	4.65	2.91	4.07	4.03	7.91	5.70	2.93	4.87
Inspections	Mean	3.66	6.89	5.22	5.17	4.91	3.26	6.64	4.18	4.26	4.13
	S.D.	3.33	7.23	2.45	2.80	3.85	3.38	8.22	2.96	2.76	3.94
OOTW	Mean	4.38	3.23	3.40	2.80	3.46	4.82	2.50	7.07	5.28	5.38
	S.D.	5.41	3.18	3.41	2.05	3.78	5.42	3.75	9.01	5.37	6.64
Wing Ex.	Mean	8.78	6.33	9.90	5.71	7.45	5.25	7.00	5.19	5.00	5.32
	S.D.	6.17	3.48	3.91	4.45	5.14	4.96	7.02	4.19	4.14	4.78
Cmd Ex.	Mean	2.50	1.33	4.58	1.23	2.19	1.97	0.81	3.27	1.43	2.08
	S.D.	2.52	1.93	4.86	1.50	2.90	2.18	1.46	3.75	1.91	2.74
Jnt Ex.	Mean	1.96	1.23	6.13	1.97	2.55	1.61	1.04	4.14	2.35	2.49
	S.D.	2.71	1.62	4.37	1.94	3.10	2.21	1.52	6.22	2.32	3.95
Cmb Ex.	Mean	0.55	0.66	5.14	0.58	1.32	0.92	0.53	3.09	1.29	1.61
	S.D.	1.31	1.47	4.30	0.96	2.62	1.41	1.18	3.19	1.95	2.39
HHQ Task	Mean	2.70	0.64	5.12	1.09	2.20	2.77	0.76	4.37	1.44	2.65
	S.D.	2.82	1.80	3.11	1.80	2.81	3.23	2.20	5.49	2.34	3.95
Local Task	Mean	2.91	1.41	3.57	2.40	2.63	2.64	2.55	3.48	2.94	2.96
	S.D.	3.59	1.80	2.89	5.92	4.43	2.86	5.26	5.33	7.38	5.40
Overall	Mean	10.01	10.00	10.01	10.00	10.01	10.00	9.98	10.01	10.00	10.00
	S.D.	20.19	22.40	14.74	21.54	20.25	21.38	22.51	18.08	20.81	20.43

Table A.2

Means and Standard Deviations for Reported Percent
of Time Spent on Each Activity

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	55.55	46.72	49.34	46.58	50.56	69.49	78.23	61.43	57.79	64.78
	S.D.	13.73	31.77	21.32	19.83	19.73	17.49	20.54	27.79	23.46	23.83
Off-Station	Mean	2.93	9.61	7.90	4.12	5.35	3.93	3.57	7.24	4.03	5.08
	S.D.	3.76	6.90	6.78	4.40	5.80	4.32	4.61	7.16	2.12	5.40
Inspections	Mean	6.61	12.74	6.91	10.74	8.18	3.01	6.62	4.07	3.94	3.94
	S.D.	7.24	10.44	5.36	6.65	7.01	2.61	5.59	3.46	4.05	3.73
OOTW	Mean	8.26	3.85	11.74	13.08	10.39	7.08	1.31	6.92	10.86	7.35
	S.D.	7.22	8.73	16.16	12.62	12.50	7.47	4.14	9.97	9.03	8.87
Wing Ex.	Mean	9.16	16.02	8.20	7.03	8.73	4.68	2.19	3.29	4.68	3.95
	S.D.	6.20	13.78	4.23	6.21	6.67	3.81	2.15	3.12	4.51	3.71
Cmd Ex.	Mean	4.51	0.15	2.75	0.99	2.73	1.14	0.48	1.77	2.69	1.66
	S.D.	5.07	0.60	4.60	3.71	4.63	2.04	0.70	1.48	3.54	2.33
Jnt Ex.	Mean	1.20	0.57	2.84	5.49	2.82	1.23	0.60	3.92	4.87	2.96
	S.D.	1.84	1.32	4.21	7.05	4.77	2.52	0.92	9.72	6.10	6.78
Cmb Ex.	Mean	1.43	0.06	2.46	5.61	2.77	0.36	0.45	0.76	1.30	0.72
	S.D.	1.83	0.24	3.73	7.38	4.77	1.01	0.68	1.37	1.57	1.30
HHQ Task	Mean	3.91	1.61	4.15	1.84	3.30	5.12	1.05	5.81	3.56	4.61
	S.D.	3.53	3.36	7.33	3.42	5.18	6.90	3.83	8.68	4.60	7.03
Local Task	Mean	6.50	8.70	3.63	4.68	5.21	4.03	5.50	4.89	6.24	4.98
	S.D.	6.35	8.06	4.58	4.68	5.67	4.72	19.31	6.41	11.43	9.27
Overall	Mean	10.01	10.00	9.99	10.01	10.00	10.01	10.00	10.01	10.00	10.00
	S.D.	16.72	17.92	16.52	15.48	16.41	21.10	24.68	20.30	18.60	20.62

		Minot AFB					Group Averages Three Bases				Activity Ave.
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	38.07	60.55	30.03	51.02	44.77	54.53	62.69	50.60	51.26	53.20
	S.D.	19.03	13.64	19.12	21.52	21.67	20.67	24.56	26.01	21.71	23.16
Off-Station	Mean	3.08	2.38	4.16	3.53	3.35	3.28	4.63	6.98	3.84	4.63
	S.D.	4.36	3.45	2.79	3.56	3.71	4.11	5.67	6.53	3.56	5.16
Inspections	Mean	11.61	14.37	8.16	16.53	13.38	7.02	11.44	6.03	11.57	8.49
	S.D.	10.62	12.26	4.02	11.40	10.78	8.20	10.45	4.73	9.93	8.55
OOTW	Mean	4.98	1.06	2.60	4.11	3.77	6.89	1.86	8.25	8.66	7.33
	S.D.	5.53	1.51	3.29	3.37	4.18	6.90	5.13	12.81	9.55	9.74
Wing Ex.	Mean	23.42	15.42	28.16	12.65	18.85	12.13	11.30	9.84	8.88	10.44
	S.D.	8.86	9.89	9.79	8.70	10.87	10.13	11.31	10.28	7.81	9.73
Cmd Ex.	Mean	5.90	1.63	8.86	1.67	4.14	3.89	0.88	3.45	1.71	2.84
	S.D.	4.50	2.45	9.45	1.78	5.45	4.56	1.76	5.63	3.02	4.46
Jnt Ex.	Mean	2.20	1.10	3.17	4.46	3.13	1.52	0.80	3.32	4.89	2.96
	S.D.	2.80	1.87	3.42	4.04	3.55	2.40	1.48	6.79	5.63	5.17
Cmb Ex.	Mean	0.84	0.73	2.83	0.30	0.93	0.92	0.47	1.86	2.25	1.54
	S.D.	1.88	2.08	3.06	0.77	2.00	1.68	1.41	3.02	4.85	3.32
HHQ Task	Mean	6.49	0.45	7.60	2.98	4.51	5.08	0.94	5.40	2.76	4.10
	S.D.	5.47	1.21	3.95	4.20	4.96	5.41	2.86	7.51	4.09	5.78
Local Task	Mean	3.43	2.32	4.70	2.73	3.22	4.79	5.00	4.31	4.22	4.51
	S.D.	3.64	2.69	5.90	3.70	4.03	5.27	11.96	5.58	6.80	6.68
Overall	Mean	10.00	10.00	10.03	10.00	10.01	10.01	10.00	10.00	10.00	10.00
	S.D.	13.88	18.95	12.60	16.85	15.62	17.43	20.71	17.50	16.86	17.61

Table A.3

Means and Standard Deviations for Effects of Activities on Wartime-Weighted Missions

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.41	2.67	3.18	3.81	3.39	2.82	2.62	3.10	3.21	2.99
	S.D.	0.70	1.21	0.84	0.52	0.81	0.83	0.93	0.73	0.74	0.80
Off-Station	Mean	3.41	2.51	3.04	3.70	3.31	3.25	2.77	2.54	2.71	2.83
	S.D.	0.69	1.14	0.55	0.65	0.74	0.61	0.93	0.73	0.77	0.78
Inspections	Mean	2.94	2.42	2.75	2.99	2.86	3.03	2.39	2.71	2.97	2.85
	S.D.	0.86	0.72	0.72	0.67	0.77	0.76	0.75	0.53	0.60	0.67
OOTW	Mean	2.52	2.42	2.68	2.78	2.63	2.49	2.79	2.47	2.37	2.48
	S.D.	0.75	0.61	0.91	0.77	0.80	0.63	0.54	0.50	0.62	0.58
Wing Ex.	Mean	2.68	2.10	2.74	3.01	2.75	2.65	2.26	2.56	2.52	2.56
	S.D.	0.88	0.79	0.76	0.67	0.81	0.89	0.60	0.48	0.63	0.69
Cmd Ex.	Mean	2.89	2.99	2.73	2.83	2.82	2.80	2.56	2.68	2.28	2.61
	S.D.	0.70	0.29	0.69	0.55	0.68	0.89	0.49	0.49	0.63	0.70
Jnt Ex.	Mean	3.13	3.02	2.81	2.61	2.87	2.71	2.68	2.59	2.28	2.56
	S.D.	0.51	0.27	0.65	0.53	0.60	0.79	0.49	0.71	0.64	0.72
Cmb Ex.	Mean	3.13	3.09	2.78	2.38	2.85	2.62	2.62	2.93	2.32	2.63
	S.D.	0.50	0.35	0.64	0.44	0.61	0.87	0.42	0.43	0.74	0.71
HHQ Task	Mean	2.21	2.42	2.41	2.64	2.36	2.61	2.48	2.44	2.14	2.43
	S.D.	0.78	0.72	0.68	0.51	0.71	0.72	0.51	0.56	0.59	0.65
Local Task	Mean	1.91	2.27	2.24	2.61	2.23	2.55	2.35	2.27	2.37	2.40
	S.D.	0.67	0.67	0.62	0.53	0.67	0.59	0.50	0.53	0.39	0.53
Overall	Mean	2.83	2.46	2.74	3.01	2.82	2.76	2.55	2.63	2.52	2.64
	S.D.	0.85	0.86	0.75	0.76	0.80	0.78	0.66	0.62	0.72	0.71

		Minot AFB					Group Averages Three Bases				Activity
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.43	3.81	3.00	3.46	3.43	3.24	3.16	3.12	3.51	3.28
	S.D.	0.63	0.99	0.73	0.62	0.72	0.77	1.17	0.78	0.66	0.80
Off-Station	Mean	3.16	2.90	2.85	3.26	3.12	3.29	2.75	2.82	3.26	3.10
	S.D.	0.47	0.48	0.97	0.90	0.77	0.61	0.86	0.74	0.87	0.78
Inspections	Mean	2.75	2.33	2.27	2.20	2.42	2.91	2.37	2.65	2.65	2.72
	S.D.	0.77	0.80	0.73	1.00	0.89	0.80	0.75	0.68	0.89	0.81
OOTW	Mean	2.78	2.34	2.67	2.60	2.65	2.59	2.53	2.60	2.60	2.59
	S.D.	0.72	0.61	0.85	0.85	0.78	0.71	0.61	0.77	0.78	0.73
Wing Ex.	Mean	2.57	1.87	2.25	2.18	2.29	2.64	2.04	2.59	2.54	2.54
	S.D.	0.89	0.51	0.88	0.66	0.79	0.88	0.63	0.71	0.74	0.79
Cmd Ex.	Mean	2.84	2.17	2.68	2.28	2.59	2.85	2.45	2.70	2.36	2.68
	S.D.	0.83	0.48	0.75	0.70	0.79	0.80	0.53	0.63	0.67	0.73
Jnt Ex.	Mean	2.86	2.43	2.85	2.90	2.84	2.91	2.61	2.74	2.64	2.76
	S.D.	0.75	0.48	0.58	0.43	0.58	0.70	0.50	0.66	0.58	0.65
Cmb Ex.	Mean	3.01	2.50	2.81	2.75	2.84	2.95	2.65	2.83	2.46	2.77
	S.D.	0.81	0.46	0.63	0.66	0.70	0.73	0.46	0.58	0.65	0.67
HHQ Task	Mean	2.65	2.57	2.34	2.35	2.49	2.48	2.49	2.40	2.33	2.42
	S.D.	0.72	0.64	0.74	0.61	0.69	0.76	0.60	0.65	0.60	0.68
Local Task	Mean	2.46	2.09	2.11	2.58	2.41	2.28	2.22	2.23	2.54	2.34
	S.D.	0.47	0.57	0.46	0.51	0.53	0.66	0.58	0.56	0.50	0.59
Overall	Mean	2.85	2.53	2.58	2.69	2.71	2.81	2.52	2.67	2.74	2.73
	S.D.	0.76	0.88	0.78	0.84	0.82	0.80	0.80	0.72	0.80	0.78

Table A.4

Means and Standard Deviations for Effects on Peacetime-Weighted Missions

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.44	2.79	3.16	3.92	3.43	2.82	2.66	3.05	3.19	2.97
	S.D.	0.69	1.26	0.84	0.68	0.85	0.80	0.88	0.72	0.71	0.78
Off-Station	Mean	3.46	2.59	3.02	3.71	3.33	3.25	2.68	2.49	2.75	2.80
	S.D.	0.67	1.19	0.56	0.71	0.75	0.59	0.90	0.67	0.81	0.77
Inspections	Mean	2.95	2.42	2.73	2.94	2.84	2.99	2.27	2.69	2.88	2.78
	S.D.	0.86	0.70	0.72	0.71	0.77	0.76	0.80	0.54	0.61	0.69
OOTW	Mean	2.48	2.42	2.64	2.61	2.56	2.46	2.67	2.36	2.40	2.43
	S.D.	0.77	0.60	0.90	0.57	0.76	0.61	0.59	0.46	0.58	0.56
Wing Ex.	Mean	2.69	2.07	2.69	2.80	2.68	2.59	2.16	2.44	2.45	2.46
	S.D.	0.84	0.73	0.72	0.62	0.75	0.86	0.51	0.42	0.63	0.65
Cmd Ex.	Mean	2.89	2.98	2.70	2.71	2.79	2.77	2.42	2.55	2.24	2.54
	S.D.	0.68	0.26	0.67	0.55	0.66	0.87	0.54	0.47	0.60	0.68
Jnt Ex.	Mean	3.11	3.02	2.78	2.44	2.80	2.67	2.48	2.46	2.22	2.47
	S.D.	0.52	0.23	0.63	0.57	0.62	0.76	0.58	0.62	0.60	0.67
Cmb Ex.	Mean	3.11	3.09	2.77	2.19	2.80	2.60	2.41	2.72	2.31	2.54
	S.D.	0.51	0.33	0.63	0.51	0.64	0.83	0.50	0.47	0.72	0.68
HHQ Task	Mean	2.19	2.43	2.38	2.60	2.34	2.58	2.40	2.35	2.18	2.39
	S.D.	0.80	0.73	0.68	0.52	0.72	0.72	0.48	0.52	0.66	0.63
Local Task	Mean	1.90	2.34	2.24	2.60	2.23	2.53	2.34	2.25	2.37	2.37
	S.D.	0.70	0.65	0.62	0.53	0.68	0.60	0.44	0.55	0.45	0.55
Overall	Mean	2.83	2.49	2.71	2.93	2.79	2.73	2.45	2.54	2.50	2.58
	S.D.	0.86	0.87	0.74	0.81	0.81	0.77	0.66	0.60	0.71	0.70

		Minot AFB					Group Averages Three Bases				Activity
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.42	3.87	2.92	3.42	3.40	3.25	3.18	3.08	3.53	3.27
	S.D.	0.59	0.96	0.73	0.59	0.71	0.75	1.15	0.77	0.71	0.81
Off-Station	Mean	3.14	2.90	2.86	3.18	3.09	3.30	2.74	2.78	3.24	3.08
	S.D.	0.47	0.49	0.93	0.84	0.73	0.60	0.86	0.72	0.87	0.78
Inspections	Mean	2.73	2.32	2.24	2.13	2.37	2.89	2.32	2.63	2.59	2.68
	S.D.	0.75	0.80	0.66	1.00	0.88	0.79	0.77	0.66	0.90	0.80
OOTW	Mean	2.75	2.37	2.73	2.51	2.61	2.55	2.50	2.53	2.52	2.53
	S.D.	0.70	0.55	0.85	0.80	0.75	0.70	0.58	0.75	0.67	0.69
Wing Ex.	Mean	2.56	1.82	2.24	2.12	2.25	2.62	2.00	2.52	2.43	2.48
	S.D.	0.86	0.46	0.84	0.67	0.78	0.85	0.57	0.66	0.70	0.75
Cmd Ex.	Mean	2.81	2.15	2.61	2.25	2.55	2.83	2.37	2.63	2.32	2.63
	S.D.	0.81	0.56	0.76	0.70	0.79	0.77	0.57	0.61	0.65	0.71
Jnt Ex.	Mean	2.84	2.42	2.79	2.83	2.79	2.88	2.51	2.67	2.54	2.69
	S.D.	0.72	0.52	0.61	0.43	0.58	0.69	0.55	0.64	0.58	0.65
Cmb Ex.	Mean	2.97	2.46	2.75	2.73	2.80	2.92	2.51	2.75	2.39	2.71
	S.D.	0.79	0.54	0.63	0.67	0.70	0.71	0.53	0.58	0.68	0.68
HHQ Task	Mean	2.65	2.53	2.31	2.33	2.47	2.46	2.43	2.36	2.34	2.40
	S.D.	0.69	0.56	0.74	0.60	0.68	0.76	0.56	0.63	0.62	0.68
Local Task	Mean	2.45	2.10	2.04	2.60	2.41	2.27	2.25	2.21	2.55	2.33
	S.D.	0.47	0.55	0.47	0.53	0.55	0.67	0.55	0.57	0.52	0.60
Overall	Mean	2.83	2.53	2.54	2.64	2.68	2.80	2.49	2.62	2.69	2.69
	S.D.	0.74	0.89	0.77	0.83	0.80	0.80	0.80	0.70	0.81	0.78

Table A.5

Means and Standard Deviations for Effects of Activities on Work Intensity

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.93	3.99	3.63	4.00	3.85	3.44	3.62	4.16	3.68	3.77
	S.D.	0.70	0.82	0.75	0.67	0.73	0.94	0.85	0.89	0.61	0.89
Off-Station	Mean	2.61	3.59	3.22	4.16	3.26	3.24	2.94	3.57	3.33	3.37
	S.D.	0.93	0.61	1.15	0.80	1.13	1.04	0.73	0.84	0.64	0.86
Inspections	Mean	3.82	4.41	4.20	4.78	4.23	3.67	4.25	3.97	3.82	3.87
	S.D.	0.95	0.75	0.96	0.53	0.92	1.24	0.69	0.76	0.77	0.94
OOTW	Mean	4.49	2.64	4.12	4.21	4.21	3.97	3.45	4.44	3.97	4.08
	S.D.	0.75	0.97	0.87	0.72	0.88	0.99	0.89	0.83	0.73	0.91
Wing Ex.	Mean	4.27	4.75	4.30	4.32	4.32	4.29	3.76	3.89	4.30	4.10
	S.D.	0.78	0.54	0.99	0.60	0.81	0.94	0.73	0.86	0.55	0.84
Cmd Ex.	Mean	3.81	3.68	3.94	4.12	3.90	3.96	3.63	3.64	4.16	3.85
	S.D.	1.31	1.28	0.99	0.48	1.11	0.61	0.88	0.77	0.73	0.74
Jnt Ex.	Mean	3.89	3.91	3.97	4.49	4.09	3.87	3.64	3.75	4.44	3.93
	S.D.	0.51	1.13	0.84	0.65	0.75	0.69	0.88	0.88	0.64	0.82
Cmb Ex.	Mean	3.64	3.86	4.07	4.60	4.02	4.05	3.77	3.68	3.81	3.83
	S.D.	0.68	1.45	0.90	0.58	0.84	0.70	0.62	0.79	1.04	0.82
HHQ Task	Mean	3.97	3.81	4.10	4.21	4.06	3.85	3.20	3.80	4.11	3.83
	S.D.	0.94	0.88	0.87	0.87	0.90	1.10	0.88	0.95	0.95	1.01
Local Task	Mean	3.46	3.38	3.51	3.72	3.54	3.21	3.34	3.47	3.73	3.41
	S.D.	0.97	0.60	0.92	0.75	0.88	1.03	0.67	0.80	0.71	0.87
Overall	Mean	3.79	3.87	3.90	4.26	3.94	3.74	3.59	3.84	3.92	3.80
	S.D.	1.01	0.96	0.98	0.73	0.96	1.02	0.84	0.88	0.79	0.91

		Minot AFB					Group Averages Three Bases				Activity
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.45	4.00	4.31	3.52	3.68	3.63	3.87	3.96	3.72	3.77
	S.D.	0.92	0.59	0.87	0.72	0.85	0.87	0.76	0.87	0.70	0.83
Off-Station	Mean	3.46	3.22	3.35	3.54	3.45	3.04	3.23	3.38	3.68	3.35
	S.D.	0.74	0.97	0.95	0.72	0.80	0.98	0.83	1.00	0.79	0.96
Inspections	Mean	4.67	4.33	4.67	4.90	4.72	4.03	4.32	4.19	4.59	4.27
	S.D.	0.55	0.70	0.66	0.31	0.54	1.04	0.70	0.86	0.69	0.89
OOTW	Mean	4.02	3.46	3.68	4.54	4.15	4.19	3.27	4.20	4.28	4.15
	S.D.	0.73	1.28	1.09	0.65	0.89	0.86	1.10	0.91	0.72	0.89
Wing Ex.	Mean	4.82	4.49	4.94	4.73	4.76	4.44	4.30	4.26	4.49	4.39
	S.D.	0.47	0.80	0.25	0.56	0.54	0.79	0.82	0.92	0.60	0.79
Cmd Ex.	Mean	4.18	3.84	4.75	4.22	4.30	3.95	3.73	3.99	4.18	4.00
	S.D.	0.80	0.88	0.54	0.93	0.84	1.01	0.89	0.92	0.79	0.93
Jnt Ex.	Mean	4.32	3.62	4.10	4.43	4.28	4.03	3.65	3.92	4.45	4.10
	S.D.	0.70	1.00	0.76	0.70	0.76	0.66	0.93	0.84	0.66	0.78
Cmb Ex.	Mean	3.69	3.83	4.11	3.25	3.78	3.78	3.79	3.96	4.01	3.91
	S.D.	0.87	1.22	0.84	0.59	0.89	0.74	0.88	0.87	0.94	0.85
HHQ Task	Mean	4.12	4.05	4.27	4.01	4.11	3.98	3.51	4.03	4.09	4.00
	S.D.	0.84	0.60	0.46	0.69	0.71	0.96	0.89	0.86	0.81	0.89
Local Task	Mean	3.42	3.69	4.26	4.02	3.85	3.37	3.48	3.62	3.86	3.59
	S.D.	1.08	0.79	0.84	0.83	0.95	1.02	0.70	0.90	0.79	0.92
Overall	Mean	4.05	3.90	4.27	4.18	4.13	3.85	3.77	3.95	4.14	3.95
	S.D.	0.92	0.94	0.86	0.84	0.88	0.99	0.92	0.93	0.81	0.93

Table A.6

Means and Standard Deviations for Effects of Activities on Work Week Length (Hrs)

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	44.82	47.21	49.86	54.21	49.09	41.20	43.81	54.32	47.44	47.78
	S.D.	4.92	4.72	4.50	11.25	7.80	2.80	3.31	14.19	12.63	11.99
Off-Station	Mean	43.05	42.51	49.45	55.29	48.33	41.73	42.49	49.67	45.04	45.75
	S.D.	4.06	2.99	5.39	10.39	8.37	4.58	3.04	6.27	10.27	7.75
Inspections	Mean	59.04	49.67	54.38	62.95	57.87	50.98	50.27	65.62	56.22	58.35
	S.D.	17.51	6.50	9.12	15.53	14.39	14.19	7.36	13.89	13.20	14.89
OOTW	Mean	46.52	46.73	57.10	63.15	54.28	41.07	60.20	55.47	54.77	50.74
	S.D.	4.36	7.63	10.01	11.48	11.10	16.70	37.85	11.17	14.38	16.78
Wing Ex.	Mean	62.45	69.24	60.57	58.17	61.16	67.92	53.80	68.41	57.88	64.94
	S.D.	13.53	12.14	9.20	9.70	11.30	11.91	14.52	15.28	13.01	14.46
Cmd Ex.	Mean	51.54	49.64	55.14	61.26	54.65	56.39	59.37	50.62	65.83	56.23
	S.D.	15.02	3.23	9.03	11.33	12.36	11.70	19.44	9.49	12.46	12.79
Jnt Ex.	Mean	51.08	50.66	54.86	71.89	58.18	60.56	54.41	54.41	64.78	58.48
	S.D.	13.47	1.75	8.77	19.50	15.80	18.43	17.54	11.85	10.94	14.51
Cmb Ex.	Mean	51.10	52.91	54.57	62.90	55.21	54.14	61.08	54.10	69.98	58.74
	S.D.	13.46	6.52	8.89	15.00	12.44	14.26	19.05	12.71	7.30	13.89
HHQ Task	Mean	49.73	44.98	55.56	59.12	53.86	50.43	47.80	52.00	50.53	50.81
	S.D.	12.74	4.35	11.70	12.48	12.51	11.08	14.37	13.15	13.85	12.61
Local Task	Mean	45.42	42.68	48.76	51.18	47.94	43.09	42.23	47.67	46.49	45.58
	S.D.	4.63	3.11	7.27	16.43	10.01	7.67	2.45	7.80	11.42	8.30
Overall	Mean	50.43	49.93	54.02	59.41	53.89	50.13	48.84	55.35	55.19	53.31
	S.D.	12.66	11.02	9.27	14.34	12.41	14.86	14.54	13.47	14.44	14.41

		Minot AFB					Group Averages Three Bases				Activity Ave.
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	43.06	44.98	50.87	49.55	47.01	43.15	45.19	51.86	50.76	48.02
	S.D.	4.08	4.46	9.20	7.84	7.36	4.32	4.33	10.39	10.39	9.20
Off-Station	Mean	40.07	44.20	48.12	48.39	45.46	41.77	42.97	49.27	49.75	46.63
	S.D.	4.50	3.62	9.90	7.92	8.09	4.47	3.20	6.78	10.13	8.18
Inspections	Mean	82.20	54.94	78.11	88.54	80.60	65.52	52.38	62.91	72.42	65.54
	S.D.	9.38	12.66	17.53	12.46	15.85	19.15	10.24	15.43	19.66	18.36
OOTW	Mean	45.25	56.38	49.65	52.02	49.62	44.72	54.80	55.13	56.39	51.80
	S.D.	5.82	15.69	7.62	8.98	8.79	9.73	23.59	10.37	12.05	12.55
Wing Ex.	Mean	80.89	66.11	80.47	87.27	81.38	70.25	63.74	66.93	70.78	68.87
	S.D.	10.36	15.75	14.98	12.68	14.04	14.34	15.43	14.55	18.66	15.86
Cmd Ex.	Mean	78.24	61.25	71.59	81.22	76.56	61.52	58.41	57.07	70.81	61.95
	S.D.	13.24	16.92	16.53	24.21	18.76	18.42	16.21	13.49	19.83	17.74
Jnt Ex.	Mean	64.41	52.13	59.99	52.66	57.71	58.36	53.13	55.72	61.12	58.10
	S.D.	17.96	17.32	17.46	11.40	15.85	17.33	15.89	12.04	16.36	15.39
Cmb Ex.	Mean	62.01	44.85	60.29	57.85	59.16	54.78	52.05	55.65	63.25	57.20
	S.D.	19.92	4.77	16.75	13.60	16.60	16.18	13.69	12.14	13.28	14.10
HHQ Task	Mean	55.14	45.72	58.40	52.06	54.50	51.58	46.61	55.01	53.76	53.08
	S.D.	20.09	4.04	10.95	7.44	14.34	14.95	10.30	12.13	11.66	13.14
Local Task	Mean	46.26	42.40	54.03	51.10	49.39	45.07	42.42	49.35	50.44	47.77
	S.D.	10.85	3.92	9.41	12.75	11.39	7.61	3.18	8.13	14.00	10.12
Overall	Mean	60.48	51.63	61.42	61.24	60.22	53.58	50.27	55.91	59.25	55.72
	S.D.	20.31	13.63	17.30	19.92	19.26	16.70	13.33	12.97	17.14	15.72

Table A.7

Means and Standard Deviations for Effects of Activities on Professional Growth and Development

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.41	3.75	3.02	3.44	3.31	3.18	3.26	2.80	3.50	3.11
	S.D.	0.49	0.57	0.74	0.55	0.64	0.68	0.84	0.97	0.85	0.88
Off-Station	Mean	3.16	3.41	2.75	3.04	2.99	2.95	3.33	2.44	3.34	2.85
	S.D.	0.37	0.30	0.52	0.62	0.53	0.38	0.76	0.52	0.87	0.71
Inspections	Mean	2.88	2.65	2.47	2.39	2.61	2.74	2.37	2.55	2.70	2.63
	S.D.	0.36	0.40	0.53	0.51	0.51	0.54	0.42	0.49	0.33	0.49
OOTW	Mean	2.14	2.54	2.18	1.91	2.10	2.54	2.72	1.96	2.68	2.38
	S.D.	0.65	0.33	0.73	0.53	0.65	0.54	0.47	0.86	1.04	0.83
Wing Ex.	Mean	2.54	2.89	2.37	2.52	2.50	2.55	2.54	2.52	2.77	2.58
	S.D.	0.57	0.30	0.47	0.61	0.54	0.52	0.41	0.41	0.30	0.44
Cmd Ex.	Mean	2.55	2.59	2.42	2.76	2.50	2.51	2.64	2.65	2.47	2.56
	S.D.	0.51	0.22	0.48	0.78	0.52	0.52	0.25	0.55	0.64	0.54
Jnt Ex.	Mean	2.52	2.82	2.40	2.28	2.42	2.54	2.64	2.57	2.30	2.50
	S.D.	0.56	0.22	0.48	0.53	0.51	0.41	0.33	0.55	0.53	0.50
Cmb Ex.	Mean	2.51	2.63	2.43	2.40	2.45	2.32	2.61	2.44	2.20	2.37
	S.D.	0.56	0.18	0.51	0.23	0.49	0.54	0.27	0.53	0.60	0.53
HHQ Task	Mean	2.32	2.35	2.42	2.44	2.38	2.54	2.52	2.29	2.31	2.40
	S.D.	0.51	0.47	0.51	0.67	0.52	0.43	0.32	0.45	0.72	0.51
Local Task	Mean	2.88	3.23	2.44	2.90	2.75	2.71	2.68	2.55	2.64	2.63
	S.D.	0.48	0.40	0.56	0.40	0.54	0.41	0.27	0.43	0.72	0.47
Overall	Mean	2.70	3.16	2.50	2.64	2.63	2.68	2.75	2.49	2.73	2.62
	S.D.	0.63	0.56	0.60	0.70	0.65	0.55	0.59	0.64	0.82	0.65

		Minot AFB					Group Averages Three Bases				Activity
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.18	3.28	2.60	2.96	3.01	3.27	3.40	2.86	3.24	3.16
	S.D.	0.66	0.73	0.69	0.85	0.78	0.61	0.75	0.84	0.80	0.77
Off-Station	Mean	3.18	2.86	2.88	3.08	3.05	3.10	3.20	2.64	3.13	2.96
	S.D.	0.68	0.63	0.42	0.32	0.51	0.49	0.64	0.53	0.60	0.59
Inspections	Mean	2.23	2.43	2.00	2.03	2.14	2.64	2.44	2.43	2.28	2.46
	S.D.	0.37	0.50	0.56	0.75	0.60	0.50	0.46	0.55	0.66	0.58
OOTW	Mean	2.14	2.32	2.52	1.94	2.13	2.28	2.50	2.15	2.11	2.20
	S.D.	0.67	0.46	0.34	0.59	0.60	0.64	0.48	0.76	0.77	0.71
Wing Ex.	Mean	1.90	2.39	1.76	1.87	1.93	2.36	2.57	2.32	2.26	2.34
	S.D.	0.48	0.34	0.42	0.64	0.55	0.60	0.40	0.51	0.69	0.59
Cmd Ex.	Mean	2.08	2.24	2.12	1.97	2.07	2.42	2.47	2.45	2.26	2.41
	S.D.	0.68	0.37	0.37	0.72	0.61	0.59	0.35	0.52	0.75	0.59
Jnt Ex.	Mean	2.41	2.47	2.43	2.69	2.54	2.49	2.60	2.47	2.48	2.49
	S.D.	0.53	0.33	0.26	0.46	0.46	0.50	0.33	0.48	0.53	0.49
Cmb Ex.	Mean	2.55	2.36	2.39	2.33	2.42	2.46	2.56	2.42	2.31	2.42
	S.D.	0.55	0.43	0.22	0.52	0.44	0.55	0.31	0.47	0.47	0.49
HHQ Task	Mean	2.33	2.42	2.27	2.45	2.36	2.39	2.48	2.35	2.40	2.38
	S.D.	0.51	0.69	0.48	0.38	0.48	0.49	0.46	0.48	0.57	0.50
Local Task	Mean	3.04	2.67	2.04	2.90	2.76	2.86	2.85	2.41	2.86	2.72
	S.D.	0.56	0.56	0.50	0.34	0.59	0.49	0.50	0.53	0.46	0.54
Overall	Mean	2.50	2.61	2.30	2.45	2.45	2.64	2.78	2.46	2.58	2.57
	S.D.	0.73	0.62	0.54	0.75	0.70	0.64	0.63	0.61	0.76	0.67

Table A.8

Means and Standard Deviations for Effects of Activities on Personal and Family Life

		Cannon AFB					Little Rock AFB				
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	3.17	3.43	2.81	2.71	2.95	3.12	3.05	2.76	3.13	2.99
	S.D.	0.47	0.42	0.85	0.49	0.66	0.67	0.91	0.84	0.90	0.82
Off-Station	Mean	2.78	3.28	2.48	2.36	2.59	2.86	3.05	2.31	2.96	2.68
	S.D.	0.57	0.44	0.57	0.69	0.64	0.38	0.64	0.48	0.35	0.53
Inspections	Mean	2.08	2.60	2.23	1.74	2.07	2.54	2.28	2.39	2.69	2.49
	S.D.	0.69	0.41	0.63	0.62	0.67	0.64	0.32	0.43	0.38	0.50
OOTW	Mean	1.61	2.31	1.74	1.62	1.67	2.26	2.43	1.80	2.23	2.09
	S.D.	0.67	0.48	0.64	0.58	0.63	0.72	0.48	0.66	0.70	0.71
Wing Ex.	Mean	1.79	2.70	2.00	1.77	1.92	2.42	2.38	2.32	2.49	2.39
	S.D.	0.52	0.79	0.60	0.55	0.62	0.60	0.29	0.46	0.33	0.48
Cmd Ex.	Mean	2.02	2.29	2.15	2.33	2.10	2.50	2.55	2.50	2.46	2.50
	S.D.	0.55	0.40	0.63	0.44	0.58	0.55	0.30	0.50	0.38	0.48
Jnt Ex.	Mean	2.35	2.17	2.23	1.95	2.19	2.57	2.46	2.43	2.23	2.43
	S.D.	0.43	0.35	0.66	0.57	0.58	0.59	0.27	0.53	0.28	0.50
Cmb Ex.	Mean	2.45	2.23	2.21	2.08	2.27	2.56	2.45	2.36	2.35	2.43
	S.D.	0.51	0.49	0.66	0.51	0.59	0.63	0.25	0.50	0.36	0.50
HHQ Task	Mean	1.80	2.26	2.19	2.31	2.04	2.36	2.64	2.24	2.24	2.32
	S.D.	0.71	0.34	0.62	0.50	0.67	0.63	0.37	0.47	0.51	0.54
Local Task	Mean	2.66	3.13	2.38	2.69	2.60	2.60	2.64	2.54	2.69	2.59
	S.D.	0.65	0.43	0.64	0.39	0.60	0.59	0.37	0.50	0.71	0.55
Overall	Mean	2.26	2.92	2.25	2.14	2.26	2.58	2.61	2.38	2.58	2.51
	S.D.	0.76	0.64	0.70	0.68	0.73	0.65	0.56	0.60	0.62	0.62

		Minot AFB					Group Averages Three Bases				Activity
		Log	Med	Ops	Spt	Ave.	Log	Med	Ops	Spt	Ave.
Routine	Mean	2.91	2.77	2.34	2.60	2.68	3.07	3.03	2.70	2.77	2.88
	S.D.	0.62	0.39	0.51	0.45	0.55	0.59	0.67	0.81	0.64	0.70
Off-Station	Mean	2.85	2.74	2.61	2.77	2.76	2.83	3.00	2.43	2.68	2.67
	S.D.	0.44	0.35	0.48	0.52	0.47	0.47	0.53	0.53	0.59	0.56
Inspections	Mean	1.64	1.83	1.68	1.83	1.75	2.09	2.17	2.20	2.00	2.11
	S.D.	0.33	0.44	0.38	0.63	0.49	0.68	0.50	0.57	0.69	0.64
OOTW	Mean	1.82	1.55	2.15	1.60	1.75	1.88	1.96	1.83	1.75	1.83
	S.D.	0.68	0.59	0.61	0.62	0.66	0.74	0.68	0.65	0.67	0.69
Wing Ex.	Mean	1.79	1.83	1.66	1.69	1.74	1.99	2.23	2.06	1.89	2.01
	S.D.	0.71	0.42	0.43	0.52	0.56	0.67	0.62	0.57	0.59	0.62
Cmd Ex.	Mean	2.02	2.08	2.11	2.02	2.05	2.18	2.31	2.27	2.23	2.23
	S.D.	0.58	0.39	0.53	0.81	0.63	0.59	0.41	0.59	0.65	0.59
Jnt Ex.	Mean	2.43	2.23	2.37	2.33	2.36	2.45	2.32	2.33	2.18	2.32
	S.D.	0.59	0.36	0.44	0.60	0.55	0.54	0.34	0.58	0.55	0.55
Cmb Ex.	Mean	2.55	2.07	2.36	2.13	2.35	2.50	2.31	2.29	2.19	2.34
	S.D.	0.62	0.14	0.31	0.63	0.52	0.57	0.30	0.56	0.50	0.55
HHQ Task	Mean	2.26	2.29	2.08	2.18	2.20	2.11	2.51	2.19	2.23	2.18
	S.D.	0.45	0.55	0.37	0.46	0.44	0.66	0.46	0.52	0.48	0.58
Local Task	Mean	2.79	2.61	2.23	2.49	2.54	2.67	2.77	2.42	2.60	2.58
	S.D.	0.65	0.49	0.46	0.50	0.57	0.63	0.48	0.56	0.51	0.58
Overall	Mean	2.29	2.22	2.16	2.17	2.21	2.37	2.52	2.28	2.27	2.33
	S.D.	0.73	0.60	0.53	0.69	0.67	0.73	0.65	0.64	0.69	0.69

Appendix B

SAMPLE LIST OF MISSIONS FOR WORKLOAD ANALYSIS SURVEY

LISTS OF MISSIONS
FOR WORKLOAD ANALYSIS SURVEY

These lists were compiled from AFI 38-101 *(AF Organizations)*, unclassified portions of designed operational capability (DOC) statements, unclassified descriptions of deploying elements (unit type codes, or UTCs), and a test survey conducted at the 2nd Bomb Wing, Barksdale Air Force Base, in December 1996.

Each squadron's missions are listed on a separate page: wartime missions first, then peacetime missions/functions for each flight.

11/11/96

Group and Squadron Commanders

1	Personnel mgt. (mentoring, teaching, appraisal, feedback, discipline, & counseling)
2	Planning (includes unit self assessment activities)
3	Staff work (meetings, special projects, and paperwork)
4	Community relations and social functions

Bomber Squadron (BS)

Wartime missions:

1 Employ munitions day/night:
   1a Strategic attack
   1b Air interdiction
   1c Offensive counter air-surface
   1d Suppression of enemy air defenses

2 Provide Commander, admin, training, ops, aircrews, intel, flightline maintenance, and on-equipment maintenance deployable to MB, LB, SB.

3 Provide limited munitions receiving, storage, inspections, assembly maintenance, and handling capability for conventional munitions.

4 Provide intermediate-level aircraft maintenance augmentation at deployed FOL. Extends maintenance concept to remove, repair, and replacement of aircraft components. Includes:
   4a   fabrication
   4b   metals
   4c   NDI
   4d   sheet metal/corrosion
   4e   fuels
   4f   AGE
   4g   survival equip
   4h   inspection
   4i   aero-repair
   4j   electro-environ
   4k   pneudraulics
   4L   egress
   4m   JEIM
   4n   supervision.

Peacetime missions:

Operational Flights
    5 Training
    6 Scheduling
    7 Life Support
    8 Intelligence
    9 Operations Data Management
  10 Squadron Medical Element

Sortie Generation Flight (MAO)
  11 Launch, recover, and service aircraft
  12 Minor scheduled inspections
  13 Corrosion control, cleaning, and ground handling
  14 On-equipment repair and component removal and replacement

Sortie Support Flight (MAF)
  15 Phase/isochronal aircraft inspections
  16 Organizational-level maintenance
  17 Issue and store alternate mission equipment and selected non-powered aerospace ground equipment
  18 Operate tool crib and perform supply liaison duties

Operational Support Squadron (OSS)

<u>*Wartime missions:*</u>

19 Initial operations support for lead independent squadron deployed to LB, SB, and BB:

19a	command	19g	life support
19b	airfield management	19h	stan-eval
19c	operations	19i	weather
19d	intel 19j	weapons and tactics	
19e	scheduling	19k	contingency operations planning cell
19f	mobility liaison		

20 Operations planning for operational unit deployment. Includes

20a	team chief	20e	intel
20b	weapons specialist	20f	plans
20c	electronic combat	20g	airspace management
20d	weapons system employment	20h	admin

21 Air traffic control tower personnel to augment mobile or fixed control tower facilities deployable to MB, COB, LB, SB, BB.

22 Augment support for air traffic operations/chief operations/liaison at control reporting centers, host-nation/all traffic control centers, embassies, and HQ staff elements. Manage military combat airspace and air ground operations.

23 Airfield management to support base operations functions.

24 Weather forecasting and briefing services for AF and Army operations BB, LB, SB, and MB. Weather support to AFFOR Air Operations Center.

<u>*Peacetime missions:*</u>

Weapons and Tactics Flight (OSK)

25 Develop procedures and tactics for employing wing operational assets

26 Advise wing staff on capabilities, limitations and status of assets

Airfield Operations Flight (OSA)

27 Airfield management

28 Air traffic control operations including:
   26a Control tower
   26b Radar operations
   26c Base operations

Current Operations Flight (OSS)

29 Monitor flying, scheduling and training operations

30 Flight hour program

31 Wing life support

32 Flight simulator systems

33 Flight records

34 Combat mission planning and sortie allocation

35 Coordinate program depot maintenance

36 Analyze maintenance data

37 Operations group database

38 Inspection support

39 Mobility requirements

Intelligence Flight (IN)

40 Train aircrew

41 Train other wing personnel

42 Threat assessment

43 Assist aircrew in applying intelligence to accomplish combat missions

Weather Flight (OSW)

44 Provide weather service for all operations on base

45 Provide weather service for all activities supported by base

46 Prepare and disseminate weather information to protect resources from:
   46a Severe weather
   46b Other environmental effects

47 Provide weather inputs to DoD databases

48 Tailor weather input to specific operations or weapons systems

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4   11/11/96

Mission Support Squadron (MS)

Wartime missions:

CPCS automated support for manpower teams. Accurate strength accountability through:
1   Base deployment/reception/redeployment processing, personnel realignments, and medical
2   Returns to duty
3   Duty status reporting
4   Timely casualty reporting and notification
5   Accountability and assistance in evacuation/reception of noncombatants
6   Routine personnel programs support in a deployed theater
7   Filler/replacement actions
8   Implementation, modification, and suspension of programs in accordance with HQ USAF
      DCS/P Emergency Action Book messages
(See AFI 35-20 for more detailed info.)

Peacetime missions:

Military Personnel Flight (DPM)
9   Provide military personnel support to:
    9a   Commanders
    9b   Military personnel
    9c   Dependents
10 Readiness programs
11 Personnel relocation actions
12 Personnel employment programs
13 Career enhancement activities
14 Maintain military member information

Civilian Personnel Flight (DPC)
15 Provide civilian personnel advice and
    administrative support to:
    15a   Commanders
    15b   Supervisors
    15c   Employees
    15d   Applicants
16 Affirmative employment
17 Labor and employee relations
18 Classification
19 Employee development
20 Resource management

Information Management Flight (IM)
21 Develop and implement policy for:
    21a   Administrative communications
    21b   Mail
    21c   Publications and forms management
        and distribution
    21d   Duplicating services
    21e   Records programs

Education Services Flight (DPE)
22 Provide educational opportunities in
    support of:
    22a   Mission readiness
    22b   Professional and personal
        development
    22c   Quality retention and recruiting
23 Oversee and procure college and
    university programs
24 Tuition assistance
25 Education counseling
26 Testing services

*Airman Professional Military Education Flight
(DPN)*
27 Instruction
28 Evaluation
29 Counseling
30 Information management support

Family Support Flight (DPF)
31 Information and referral counseling
32 Leadership counseling
33 Base family action plan
34 Relocation and transition assistance
    programs
35 Support leadership to meet family needs

Security Police Squadron (SP)

Wartime missions:

36 Resource protection, system security, base defense:
 36a Man security posts and patrols to protect resources, prevent sabotage
 36b Man listening/observation posts, defensive fighting positions, sector response or base mobile reserve forces
 36c Provide external airbase defense in a dismounted mode. *(AFI 31-101)*
37 Military working dog support:
 37a Perimeter detection for air base defense
 37b Explosive detection
 37c Law enforcement/customs support at MOBs, standby bases, bare bases, limited operating bases, and COBs
 37d Drug detection

Peacetime missions:

Administration and Support Flight (SPA)
38 Plans
39 Pass and registration
40 Reports and analysis
41 Wing information security

Training and Resources Flight (SPT)
42 Arms and equipment
43 SP unit training program
44 Military working dog program
45 Wing small arms training and maintenance

Operations Flight (SPO)
46 Law enforcement
47 Weapons system security
48 Resource protection
49 Confinement
50 Investigative functions
51 Customs
52 DARE
53 Standardization/evaluation
54 Mobility
55 Command and control

Civil Engineer Squadron (CE)

Wartime missions:

56 Civil engineer support for pre-attack, post-attack, and passive defense. Prepare bases to receive units, recover from damages, provide base operations and maintenance CE, EOD disposal, and crash rescue/fire support (aircraft firefighting support, structural, fuel, and munitions fires).

57 Strategic mission support at MOB and alternate recovery and dispersal bases; mobility personnel and equipment to support operations, war-damage repair, and coordinate conventional warfare survivability and defense; coordinate NBC defense.

58 Provide lead Prime BEEF, DP *(?)*, and fire-fighting skills for beddown using expedient or existing facilities. Operations and maintenance support for facilities and utilities during contingencies. Emergency and follow-on damage repairs at MOBs, COBs, FOLs, and BBs. Coordinate conventional warfare survivability and defense. Coordinate NBC defense and crash rescue/fire support.

59 EOD support to detect, identify, render safe, recover, and dispose of conventional, NBC, and improvised ordnance/devices. Protect resources and personnel from explosive hazards, minor munitions accidents, clandestine explosive devices, and unexploded ordnance from enemy attacks. Ordnance clearance at air heads, landing zones, captured air bases. GUU-5 and M-9 weapons proficiency. *(Training per AFI 10-201 Tables 2 and 3)*

Peacetime missions:

Housing Flight (CEH)
60 Provide permanent party personnel:
    60a Government housing or
    60b Off-base housing through referral services
61 Manage furnishings
62 Manage family housing program
63 Manage unaccompanied housing program

Engineering Flight (CEC)
64 Contractor technical design oversight
65 Contractor construction oversight
66 Base community planning

Operations Flight (CEO)
67 Construct real property
68 Maintain real property
69 Operate utility systems
70 Elements:
    70a Material acquisition
    70b Facility maintenance
    70c Infrastructure support
    70d Heavy repair

Environmental Flight (CEV)
71 Clean-up of hazardous waste sites
72 Environmental law compliance
73 Pollution prevention programs
74 NEPA planning
75 Natural/cultural management

Fire Protection Flight (CEF)
76 Emergency aircraft/rescue response
77 Emergency intervention response
78 Structural emergency and rescue response

79 HAZMAT response
80 Fire prevention, education and training
81 Confined space response
82 Emergency medical services response
83 Mutual aid response

Explosive Ordnance Disposal Flight (CED)
84 Protect people, resources, and environment from:
    84a Explosive ordnance
    84b Chemical ordnance
    84c Biological ordnance
    84d Nuclear ordnance
85 Defeat criminal or terrorist explosive devices
86 Locate, identify, disarm and neutralize explosive hazards
87 Proficiency training

Resources Flight (CER)
88 CE financial management system
89 Work information management system
90 Human resource plans and analysis
91 Real property accountability and reporting
92 Real property acquisition and disposal

Readiness Flight (CEX)
93 Contingency and disaster:
    93a Planning document preparation
    93b Training
    93c Response
94 Staff assistance visits
95 Exercise execution
96 Self inspection
97 Resource management
98 Status reports
99 NBC Control Center operations
100 NBC Monitoring Team operations
101 Survival Recovery Center support

Services Squadron (SV)

Wartime missions:

Operations at main operating bases, collocated operating bases, forward operating locations, aerial ports, bare bases, or critical CONUS bases:

102 Food service
103 Laundry
104 Field lodging/billeting
105 Fitness and recreation programs
106 Troop subsistence
107 Field exchange
108 Mortuary operations

Peacetime missions:

Resource Management Flight (SVF)
109 Provide non-appropriated fund advice to services managers
110 Computer support of services personnel
111 Equipment control and accountability

Military Support Flight (SVM)
112 Transient lodging and food service
113 Recreation and fitness activities support

Youth Support Flight (SVY)
114 Child development programs
115 Youth programs

Plans and Force Management Flight (SVX)
116 Mortuary services
117 Honor guard
118 Services squadron readiness and plans

Membership Support Flight (SVB)
119 Airman's, NCO, officers club operations
120 Bowling alley
121 Golf course
122 Special-interest clubs

Recreation Support Flight (SVR)
123 Library and information programs
124 Recreation equipment checkout
125 Recreational activities skills development

Communications Squadron (SC)

Wartime missions:

126   Initial UHF, VHF, data, and HF support for deployed wing. 3KW electrical generator.

127   Armament delivery recording imagery processing, duplication, and shipping.
128   Still and motion imagery acquisition, processing, and still-image transmission.
129   Graphics and presentation services.
130   Visual-information equipment maintenance.
131   Visual-information management in support of theater operations.

132   Provide communications personnel and maintenance in support of wing EWO taskings.

133   Support combat air forces (CAF) mission-critical computer resources:
      133a   Mission Support System (MSS) and Intra-theater Imagery Transmission System (IITS).
      133b   Installation and maintenance.
      133c   Processing and controlling data flow.
      133d   Testing software routines for verification.

134   Oversee combat camera operations:
      134a   Imaging taskings
      134b   Compiling SITREPS
      134c   Ensuring p__ transmission
      134d   Still and motion editing and duplication
      134e   ADR support
      134f   Staff and training support

135   Monitoring arrival and beddown of:
      135a   Subordinate units
      135b   Maintenance and spares program
      135c   Budget and supply
      135d   Equipment distribution
      135e   Transportation personnel

136   Weapons proficiency

Peacetime missions:

Information Systems Flight (SCB)
137   Base network control center
138   Computer helpdesk
139   Computer network management
140   Job control
141   Telecommunications messaging center
142   Information protection
143   Administrative communications
144   Customer training for network and
     software applications

Mission Systems Flight (SCM)
145   Ground radio maintenance
146   Telephone switching maintenance
147   METNAV and RADAR maintenance
148   Secure communication maintenance
149   Long haul capabilities

Support Flight (SCS)
150   Visual information support
151   Publishing service
152   C4 security
131   Unit job control
153   Maintenance scheduling
154   Systems outage and status reporting
155   Equipment listings maintenance

Plans Flight (SCX)
156   Base-level C4 systems planning
157   Mobility/deployment planning for C4
     systems
158   Requirements analysis
159   C4 architecture
160   C4 integration
161   Budgeting and billing
162   Human resources
163   C4 contract support and agreements

Transportation Squadron (LGT)

Wartime missions:

1   Transportation support for airbase operations at a deployed location with aircraft.
    1a   MHE operators and spotters
    1b   Operate forklifts and K-loaders for all except wide-body aircraft

2   Vehicle maintenance, vehicle decontamination, & traffic management

3   Command deployed transportation unit and provide the following for a 24-hour base operation:
    3a   Transportation supervisory support
    3b   Supplemental traffic management package support
    3c   Transportation supply support
    3d   Administrative support
    3e   Supplemental vehicle driver support
    3f   Supplemental vehicle maintenance support
    3g   Accomplish essential structural repair on damaged vehicles
    3h   Supplemental vehicle maintenance support for fire fighting and refueling equipment
    3i   Requisition and coordinate vehicle parts and supplies for approximately 100 vehicles.

4   Provide supplemental support and control vehicle workload with on-line VIMS.

Peacetime missions:

Vehicle Operations Flight (LGTO)
5   Transport aircrew
6   Transport maintenance/support personnel
7   Transport base population/visiting personnel
8   Operate central dispatch
9   Maintain vehicle fleet records
10 Perform operator care on vehicles
11 Manage licensing and qualification program
12 Manage vehicle control program

Vehicle Maintenance Flight (LGTM)
13 Inspect vehicles
14 Maintain vehicles
15 Manage contractor-operated parts store/depot, etc.

Traffic Management Flight (LGTT)
16 Movement of personnel and their property
17 Packing and crating services
18 Movement of surface and air freight
19 Operate base air passenger terminal

Combat Readiness Flight (LGTR)
20 Plan and execute base and unit mobility plans
21 Manage transportation augmentees
22 Train transportation personnel for deployment

Contracting Squadron (LGC)

Wartime missions:

23 Contracting support at a bare deployment site with pre-surveyed and pre-developed market contract sources.

Peacetime missions:

Construction Contracting Flight (LGCC)
24 Administer construction purchase orders
25 Administer construction contracts
26 Architectural and engineering service contracts
27 Simplified acquisition of base civil engineer requirements (SABER)

Management Analysis and Support Flight (LGCW)
28 Manage contracting information systems
29 Contracting data analysis
30 Contracting administrative support
31 Contract review
32 Competition advocate program
33 Small business program
34 Quality assurance evaluation program

Commodities Contracting Flight (LGCS)
35 Commodity purchase orders
36 Government purchase credit card program
37 Blanket purchase agreements
38 Standard form 44

Services Contracting Flight (LGCV)
39 Administer service purchase orders and contracts
40 Contracting support for contract repair and blanket purchase service agreements

Supply Squadron (LGS)

Wartime missions:

41 Support and operate LOX/LIN aviation, and ground fuel receipt, storage, and issue
42 Fuels management
43 Command & control, administer supplies and equipment, augment combat supply operations and material management
44 Support air and ground fuel receipt, storage, and distribution
45 Quality control and accountability of fuel products
46 Produce, store, and issue cryogenic products and maintain cryogenic production plants
47 Self contained automated SBSS, and microcomputer/modem/associated spares/software and computer operations.
48 Operate Aerial Bulk Fuel Delivery Systems (ABFDS).
49 Provide fuels lab equipment, tools, supplies, etc. in kit form.
50 Receive, store, issue and deliver supply/equipment assets.
51 Perform supply actitons for:
    a Supply reconstitution to support redeployments e Requisitions
    b Repair cycle and mission support actions   f Accountability
    c Supplies/equipment management   g MRSP support
    d Requirements issue

Peacetime missions:

Material Storage and Distribution Flight

(LGSD)
52 Supply and equipment:
    a Receipts
    b Ship'g/delivery
    c Accounting
    d Inspection
    e Stock
    f Store
    g Individual Eqp.
53 Support supply-related environmental compliance
54 Make base inputs into air force equipment management system (AFEMS)

Fuels Management Flight (LGSF)
55 Requisition, stock, store, issue, inspect, deliver, and account for:
    a Aviation fuel   c Cryogenic fluids
    b Ground fuel   e Missile propellants

56 Fuels training
57 Fuel quality
58 Fuel lab analysis
59 Fuels inspection
60 Fuels mobility
61 Support fuels-related environmental compliance
62 Make base inputs into air force equipment management system (AFEMS)

Material Management Flight (LGSH)
63 Monitor and manage hazardous material
64 Stock, store, issue hazardous material

65 Monitor hazardous material turn-in and disposal

Management and Systems Flight (LGSP)
66 Manage uniform materiel movement and issue priority system (UMMIPS)
67 Manage equipment records
68 Supply procedural support
69 Supply personnel training
70 Quality and strategic planning
71 Supply system support
72 Supply analytical support
73 Monitor defense business operating fund
74 Monitor air force stock fund
75 Customer training for inventory and document control
76 Supply and equipment:
    a Requisitions
    b Inventory
    c Issue
77 Make base inputs into air force equipment management system (AFEMS)
78 Make base inputs into air force equipment management system (AFEMS)

Combat Operations Support Flight (LGSC)
79 Inventory and customer support for mobility products
80 Implement lean logistics processes
81 Provide and account for MRSP, weapons, mobility bags
82 Make base inputs into air force equipment management system (AFEMS)

83 Requisition, stock, store, issue, inspect
       high-priority material (MICAP)
84 Support flightline functions

Supply Readiness Control Center (LGRS)
85 COMSEC, security, disaster preparedness
       and mobility training

86 Coordinate and monitor logistics and
       personnel movement status

Maintenance Squadron (LGM)

Wartime missions: Chop to operations group, where munitions and maintenance wartime missions are listed as:

87   Provide limited munitions receiving, storage, inspections, assembly maintenance, and handling capability for conventional munitions.

88   Provide intermediate-level aircraft maintenance augmentation at deployed FOL. Extends maintenance concept to remove, repair, and replacement of aircraft components. Includes: (88a) fabrication, (88b) metals, (88c) NDI, (88d) sheet metal/corrosion, (88e) fuels, (88f) AGE, (88g) survival equip, (88h) inspection, (88i) aero-repair, (88j) electro-environ, (88k) pneudraulics, (88L) egress, (88m) JEIM, (88n) supervision.

Peacetime missions:

Fabrication Flight (LGMF)
89   Inspect and repair aircraft associated survival equipment
90   Aircraft component
    a   Inspection
    b   Repair
    c   Fabrication
91   Non-destructive inspection
92   Aircraft structural repair

Accessories Flight (LGMC)
93   Off-equipment maintenance of:
    a   Pneudraulic systems
    b   Aircraft electrical systems
    c   Support equipment electrical systems
    d   Batteries
    e   Environmental control systems
94   On-equipment maintenance of:
    a   Pneudraulic systems
    b   Aircraft electrical systems
    c   Support equipment electrical systems
    d   Batteries
    e   Environmental control systems
95   Maintain aircraft fuel systems
96   Maintain aircraft egress systems
97   Aircraft phase inspections

Avionics Flight (LGMV)
98   Perform diagnostic and off-equipment maintenance on:
    a   Communication-navigation systems
    b   Electronic warfare systems
    c   Guidance and control systems
    d   Airborne photographic/sensor systems
    e   Repair Type-4 precision measurement equipment
99   Aircraft phase inspections

Aerospace Ground Equipment (AGE) Flight (LGMG)
100   Inspect AGE
101   Maintain AGE
102   Pickup and deliver AGE
103   Time-compliance technical orders on AGE
104   Store AGE
105   Prepare AGE for shipment

14   11/11/96

Armament Flight (LGMR)
106 Perform off-equipment maintenance on:
    a   Weapons release systems
    b   Guns
    c   Munitions racks
    d   Adapters
    e   Pylons
    f   Launchers

Maintenance Support Flight (LGMT)
107 Service transient aircraft
108 Large component repair
109 Build up and service wheels and tires

Munitions Flight (LGMW)
110 Store, maintain and dispose of:
    a   Conventional munitions
    b   Containers
    c   Dispensers
    d   Training items

Propulsion Flight (LGMP)
111 Perform off-equipment
    a   Inspection
    b   Repair
    c   Maintenance
    d   Testing of engines and
          associated support
          equipment
112 Perform on-equipment
    a   Phase inspection
    b   Phase maintenance
113 Engine trend data analysis

Test Measurement Diagnostics Equipment
(TMDE) Flight (LGMD)
114 Performs:
    a   On site testing
    b   Laboratory testing
    c   Repair
    d   Calibration of precision measurement
          equipment

Logistics Support Squadron (LGL)

Wartime missions: Chop to operations group, where wartime missions are listed as:

115 Provide Commander, admin, training, ops, aircrews, intel, flightline maintenance, and on-equipment maintenance deployable to MB, LB,SB.

116 Provide limited munitions receiving, storage, inspections, assembly maintenance, and handling capability for conventional munitions.

117 Provide intermediate-level aircraft maintenance augmentation at deployed FOL. Extends maintenance concept to remove, repair, and replacement of aircraft components. Includes fabrication, metals, NDI, sheet metal/corrosion, fuels, AGE, survival equip, inspection, aero-repair, electro-environ, pneudraulics, egress, JEIM, and supervision.

118 Initial operations support for lead independent squadron deployed to LB, SB, and BB:
(118a) command, (118b) airfield management, (118c) operations, (118d) intel,
(118e) scheduling, (118f) mobility liaison, (118g) life support, (118h) stan-eval, (118i) weather,
(118j) weapons and tactics, and (118k) contingency operations planning cell.

119 Operations planning for operational unit deployment. Includes (119a) team chief,
(119b) weapons specialist, (119c) electronic combat, (119d) weapons system employment,
(119e) intel, (119f) plans, (119g) airspace management, and (119h) admin.

120 Air traffic control tower personnel to augment mobile or fixed control tower facilities deployable to MB, COB, LB, SB, BB.

121 Augment support for air traffic operations/chief operations/liaison at control reporting centers, host-nation/all traffic control centers, embassies, and HQ staff elements. Manage military combat airspace and air ground operations.

122 Airfield management to support base operations functions.

123 Weather forecasting and briefing services for AF and Army operations BB, LB, SB, and MB. Weather support to AFFOR Air Operations Center.

Peacetime missions:

Logistics Operations Flight (LGLO)
124 Engine management
125 Logistic group input to flying schedules
126 Analysis of logistic group data
127 Wing maintenance analysis database (can be consolidated under current operations flight)
128 Supply liaison

Logistics Training Flight (LGLT)
129 Wing maintenance personnel training
        151a Direct
        151b Monitor
        151c Schedule
130 Aircraft battle damage repair training
131 Engineering technical services

Logistics Plans Flight (LGLX) (Optional)
132 Manage war reserve materiel
133 Mobility exercises
134 Mobility planning
135 Support planning
136 Support agreements

Computer Management Flight (LGLC)

MEDICAL GROUP

In contrast to the other groups, the Medical Group's wartime tasks are not listed separately for the subordinate squadrons.

Wartime missions:

1   Medical augmentation to establish air-transportable hospital capability (or augment fixed or field medical treatment facility). Outpatient and limited in-patient capability.
    1a   admin and dietetic services
    1b   emergency clinic
    1c   lab
    1d   pharmacy
    1e   bioenvironmental
    1f   public health services
    1g   combat stress and mental health care.

2   Inflight medical care for aero-medevac aircraft (flight surgeon, flight nurses, and aeromedical technicians).

3   Squadron medical element to provide aerospace medical support to flying squadron and a deployed population of 300-500 personnel. Very limited outpatient and clinical services for 30 days with basic lab.

4   Primary eye care and ophthalmic capability to 2nd-echelon and air-transportable hospital. May also be deployed to augment 3rd or 4th echelon. Provide associated support services, including messing, lodging, security, transportation, communications, medical and material supply and equipment repair.

5   Temporarily storing, inspecting, re-icing, and preparing shipment of blood products to destination, per minimums identified in AFR 168 3. Augment blood donor centers.

6   Remove or neutralize agents on wartime casualties immediately prior to being admitted to a medical treatment facility. Evaluate food exposed to NBC. Deployable to BB, LB, SB, MB.

Peacetime missions:

Medical Operations Squadron (SGO)

Medical Services Flight (SGOM)
   7   Family practice
   8   Primary care
   9   Internal medicine
  10   Emergency room
  11   Mental health
  12   Physical/occupational therapy
  13   Dermatology
  14   Neurology
  15   Inpatient medical nursing

Maternal/Child Care Flight (SGOPB)
  16   Obstetrics/gynecology
  17   Pediatric services
  18   Inpatient obstetrical and newborn
       nursing

Mental Health Flight (SGOMH)

Surgical Services Flight (SGOS)
  19   General surgery
  20   Surgical suite
  21   Anesthesia
  22   Urology
  23   Orthopedics
  24   Otolaryngology
  25   Ophthalmology
  26   Neurosurgery
  27   Plastic surgery
  28   Thoracic surgery
  29   Podiatry
  30   Central sterile supply
  31   Inpatient surgical nursing

Medical Operations Admin Flight (SGOA)

(Medical Group peacetime missions, continued)

Aerospace Medicine Squadron (SGP)

Flight Medicine Flight
  32 Provide medical care to flight personnel
     and families

Health Promotion Flight
  33 Provide programs for healthy lifestyles
     through:
     33a Stress management
     33b Cardiovascular disease
        prevention
     33c Exercise/fitness

Public Health Flight
  34 Medical intelligence
  35 Disease prevention
  36 Food safety
  37 Environmental/occupational health
  38 Medical epidemiology
  39 Health risk assessment
  40 Sanitation evaluations
  41 Entomology
  42 Decontamination

Readiness Flight
  43 Medical readiness planning
  44 Medical readiness training

Bioenvironmental Engineering Flight(SGPB)
  45 Workspace/industrial hygiene
     examinations
  46 Environmental assessment
  47 Drinking water surveillance
  48 Contingency response
  49 Radiation safety
  50 Hazardous materials management
  51 Asbestos abatement
  52 Lead based paints management
  53 Health risk assessment
  54 NBC detection/mitigation/training

Medical Support Squadron (SGS)

Resource Management Flight (MDSS)
  55 Finance reporting/managemant
  56 Performance reporting
  57 Medical manpower management
  58 Medical data analysis
  59 Third party collections
  60 Medical service accounting
  61 Nutritional service accounting
  62 Report of patients
  62 Cashier

TRICARE Flight
  64 TRICARE Contracts
  65 CHAMPUS
     65a Utilization management
     65b Beneficiary enrollment

Medical Logistics Flight
  66 Facility management
  67 Biomedical equipment maintenance
  68 Linen service
  69 Materiel service

Medical Information Systems Flight
  70 Manage medical information system

Diagnostic and Therapeutic Services Flight
  71 Pharmacy
  72 Clinical laboratory
  73 Histopathology/cytology
  74 Radiology
  75 Nutritional medicine

Personal and Administration Flight
  76 Unit administration service
  77 Unit personnel service
  78 Medical reference library

Dental Squadron (DSS)

Clinic Dentistry Flight (SGDD)

Dental Lab Flight (SGDL)

Dental Support Flight (SGDS)

Wing Staff

Wartime missions:

1 Provide staff functions for deployed units including: (1a) command, (1b) history, (1c) legal, (1d) public affairs, (1e) chaplain, (1f) safety, (1g) command post, (1h) maintenance operations center, (1i) maintenance control

2 Chaplain support for various faith groups needed to support mission requirements--deployable to any type base, air-transportable hospital, and contingency hospital

3 Manpower technicians advise commanders and functional representatives on manpower and organizational issues:
   3a Ensure units' manpower requirements are stated accurately
   3b Advise commander on proper wartime organizational placement and integration of all personnel to include ARC, augmentation forces, host nation support, contractor assets
   3c Operate the contingency operations/mobility planning and execution system and manpower data systems

4 Financial specialists to provide:
   4a Emergency requisitions of supplies and equipment
   4b Implementation of host-nation agreements and services for host nation support needs
   4c Services for essential personnel financial needs.
   4d Processing and maintenance of financial records and files for pay, travel, disbursement collection, and accounting transactions
   4e Budget and cost estimates, financial plans, budget execution, FIS management

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Peacetime missions:

Director Staff (DS)

Public Affairs Office (PA)
5 Advise commanders in communicating with Air Force members and the public
6 Identify and manage communication issues that impact the capability of the Air Force wartime missions

Safety Office (SE)
7 Identify and reduce risks to help protect resources while minimizing impact on combat capability and mission accomplishment
8 Advise commanders and supervisors on safety requirements and issues
9 Manage wing USAF mishap prevention program

History Office (HO)
10 Collect, preserve, organize, interpret and present historical data
11 Provide historical perspective for planning, doctrine, operations, policy development and decision-making
12 Provide commanders and staffs with research services
13 Prepare official histories and other publications

Staff Judge Advocate Office (JA)
14 Advise commanders on military justice, disciplinary actions, and administrative law matters
15 Prosecute courts-martial
16 Provide legal assistance related to military readiness
17 Investigate, adjudicate, and provide litigation support for all claims and civil law actions
18 Provide personal legal assistance
19 Provide legal advice to military investigative agencies
20 Act as Air Force liaison with Federal, state and local legal authorities
21 Draft and review plans for compliance with laws of armed conflict

(Wing Staff peacetime missions, continued)

Command Post (CP)
22 Implement emergency action and quick reaction checklist procedures
23 Control assigned forces
24 Operate communication systems
25 Maintain and provide communication security
26 Maintain and provide area security
27 Monitor alert force status
28 Monitor airfield, weather and Navigational aid status
29 Direct and control maintenance actions

Chaplain (HC)
31 Provides for free exercise of religion in support of mission requirements through worship, rites, religious education, visitation, counseling, etc.
32 Advise commanders and staff on religious, ethical, moral, morale and quality of life matters

Comptroller (FM)
33 Provide financial management advice and guidance to the commander and staff
34 Oversee financial services, customer support and accounting liaison activities
35 Provide oversight for morale, welfare, and recreation financial operations
36 Collect and disburse government funds

Manpower (MO)
37 Provide manpower management services and evaluations
38 Provide manpower advisory services
39 Provide wartime manpower support
40 Productivity and suggestion program management
41 Manage base manpower data system
42 Support Quality Air Force initiatives

Plans (XP)
43 Develop operations plans
44 Administer support agreements
45 Evaluate exercises

Social Actions (SA)
46 Assist commanders in conducting programs for equal opportunity and treatment
47 Assist commanders in conducting human relations education programs
48 Administer complaint program
49 Conduct human relations climate assessment

Inspection (CVI/CVR)
51 Implement the Air Force Inspection System
52 Implement complaints program
53 Implement Fraud, Waste and Abuse program

Appendix C

WORKLOAD ANALYSIS SURVEY

Workload Analysis Survey

TO: Commanders at Wing, Group, Squadron, Flight, and Section Levels

FROM: Lt Gen Phillip Ford, 8AF/CC

SUBJECT: **ANALYZING OUR WORKLOADS**

I'm concerned about the numerous taskings that keep us so busy. We know we work hard and that many of us spend a lot of time away from home. But we don't have a clear picture of how our taskings are helping or hurting us.

I've asked RAND to help us figure this out. They've developed the attached questionnaire that I encourage you to complete on behalf of your unit. It asks how ten different kinds of activities affect (1) your unit's mission capabilities and (2) use of resources, as well as how they affect (3) your people's professional growth and (4) family lives. It also asks how much of your unit's time goes to different taskings.

Besides answering the questions, you can make comments on the questionnaire. Please use the available spaces to clarify points or raise additional issues that the "canned" questions and answers don't capture.

Commanders should answer with respect to their immediate levels. That is, group commanders answer for their group-level people, squadron commanders for their squadron-level people, and so on. It's especially important to get to the "grass-roots" level in all mission areas -- e.g., to flight commanders and section chiefs who know first-hand how different activities affect their people and their capabilities. RAND's trials show that you can complete the questionnaire in about 45 minutes.

I don't want this to seem like "just more tasking" to you. I want to get a thorough and organized picture of this problem that I can present to others--more than I can develop by just talking with many of you, which I have already done. The ACC Commander and Chief of Staff of the Air Force are both interested in what comes out of this effort. I hope it will lead to insights and representations that will help us better control and focus our activities.

Thank you in advance for providing this information.

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This packet asks questions about:

- The usefulness and effects of your unit's participation in different kinds of activities; and

- How much time and effort your unit spends on those activities.

Selected commanders from the 8th Air Force down through the wing, group, squadron, flight, and section levels are providing this information about activities and the effects on their units and their immediate subordinates.

Please consider the following 10 kinds of activities as you answer.

1. Routine peacetime operations and local training. Doing your unit's work at or from your home base, including both delivering services (if any) and training for wartime.

2. Off-station training. Where part or all of your unit goes elsewhere specifically for training.

3. Inspections. ORIs, NSIs, QAFAs, etc., including both the inspections themselves and special preparations for them.

4. Peacekeeping/operations other than war. Deploying and participating in such operations—e.g., for Restore Hope in Somalia, Southern Watch in Iraq, or Deliberate Force in Bosnia.

5. Wing exercises. Involving multiple squadrons from the wing, whether local or off-base.

6. Command exercises. Involving units from other wings.

7. Joint exercises. Involving units from the Army, Navy, or Marine Corps.

8. Combined exercises . Involving units from other countries.

9. HHQ/other tasking. For example: Green Sky, Busy Luggage, or Coronet events.

10. Other local tasking. For example: open houses, air shows, anniversaries, graduations.

Six sets of questions, each with its own short instructions, address:

- Your unit's mission areas (MISSION AREAS)

- How the 10 activities affect your unit's ability to do its missions (EFFECTS ON READINESS)

- How efficiently the activities use your unit's resources (USE OF RESOURCES)

- How the activities affect the professional growth of unit members (PROFESSIONAL GROWTH)

- How the activities affect the personal lives of unit members and their families (PERSONAL AND FAMILY LIFE)

- How much time your unit spends on the 10 activities (TIME SPENT)

You'll probably need about 45 minutes to answer the questions. Participation is voluntary. Thank you for your help.

If you need assistance or clarification, please call your Wing Headquarters, who'll put you in touch with a member of RAND's survey team.

Q1.   **Please list your unit's primary mission areas and rate their importance to your unit's peacetime and wartime/contingency operations.**

Consult the list of mission areas you received along with this survey. The peacetime missions come from Air Force Instruction 38-101, *Air Force Organization.* The wartime missions in the list are drawn from deploying units' official Designed Operational Capability (DOC) statements and Mission Capability (MISCAP) statements.

	Importance in Peacetime					Importance in Wartime				
MISSION AREA	Much less impor-tant than average	Less impor-tant than average	Average impor-tance	More impor-tant than average	Much more impor-tant than average	Much less impor-tant than average	Less impor-tant than average	Average impor-tance	More impor-tant than average	Much more impor-tant than average
1. _____	1	2	3	4	5	1	2	3	4	5
2. _____	1	2	3	4	5	1	2	3	4	5
3. _____	1	2	3	4	5	1	2	3	4	5
4. _____	1	2	3	4	5	1	2	3	4	5
5. _____	1	2	3	4	5	1	2	3	4	5
6. _____	1	2	3	4	5	1	2	3	4	5
7. _____	1	2	3	4	5	1	2	3	4	5
8. _____	1	2	3	4	5	1	2	3	4	5
9. _____	1	2	3	4	5	1	2	3	4	5
10. _____	1	2	3	4	5	1	2	3	4	5
11. _____	1	2	3	4	5	1	2	3	4	5
12. _____	1	2	3	4	5	1	2	3	4	5
13. _____	1	2	3	4	5	1	2	3	4	5
14. _____	1	2	3	4	5	1	2	3	4	5
15. _____	1	2	3	4	5	1	2	3	4	5

SPECIAL INSTRUCTIONS:

Pages 5-12 ask how different activities affect your unit's readiness. Please use as many pages as you need in order to answer for each of the mission areas you've listed above. (For example, if you've listed five mission areas above, you'll use only pages 5-7, since each page addresses two mission areas.) After rating how each activity affects mission capability, please add your comments—e.g., clarifying that an activity helps some people in the unit more than others (e.g., officers more than enlisted personnel, some AFSCs more than others, or military personnel more than civilians).

Once you've answered the following questions for each mission area you listed above, please skip to page 13.

EFFECTS ON READINESS

Q2. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 1 listed on page 4?

Mission Area 1: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q3. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 2 listed on page 4?

Mission Area 2: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q4. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 3 listed on page 4?

Mission Area 3: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q5. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 4 listed on page 4?

Mission Area 4: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

EFFECTS ON READINESS

Q6. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 5 listed on page 4?

Mission Area 5: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q7. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 6 listed on page 4?

Mission Area 6: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q8. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 7 listed on page 4?

Mission Area 7: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q9. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 8 listed on page 4?

Mission Area 8: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q10. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 9 listed on page 4?

Mission Area 9: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q11. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 10 listed on page 4?

Mission Area 10: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

EFFECTS ON READINESS

Q12. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 11 listed on page 4?

Mission Area 11: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q13. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 12 listed on page 4?

Mission Area 12: _____ (Please copy mission name from page 4)

	Serious degrad-ation	Some degrad-ation	No effect	Positive improve-ment	Great improve-ment	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q14. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 13 listed on page 4?

Mission Area 13: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q15. How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 14 listed on page 4?

Mission Area 14: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q16. **How do each of the ten activities listed below affect unit and individual preparedness (the ability to perform the mission effectively, efficiently, and without delay) to perform in Mission Area 15 listed on page 4?**

Mission Area 15: _____ (Please copy mission name from page 4)

	Serious degrad- ation	Some degrad- ation	No effect	Positive improve- ment	Great improve- ment	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises..	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

The next seven questions (pages 13-16) ask about the effects of the activities on the utilization of resources.

Q17.   What is the **level of intensity of work by unit members** when engaged in the following activities?

The level of intensity is...

	Very low	Low	Average	High	Very high	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q18.   What effect do the following activities have on the **wear and tear on equipment**?

The wear and tear is...

	Very low	Low	Average	High	Very high	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q19. How much do the following activities use **special facilities related to this unit** -- e.g., training ranges or bare-base resources?

The use is ...

	Very low	Low	Average	High	Very high	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q20. How costly, in terms of **dollar costs for transportation, fuel, etc.** are the following activities?

The costs are ...

	Very low	Low	Average	High	Very high	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q21. How do each of the following activities affect the **opportunity of the unit to practice the full range of its capabilities?**

The effect is ...

	Very negative	Nega-tive	Neutral	Posi-tive	Very positive	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises..	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q22. How do each of the following activities affect the amount of unit **interaction and coordination with other units?**

The amount is ...

	Very little	Little	Average	Great	Very great	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises..	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q23. How do the following activities affect the **unit's cohesion and internal integration** (i.e., its esprit de corps and ability to work together)?

The effect is ...

	Very negative	Nega- tive	Neutral	Posi- tive	Very positive	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises..	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

PROFESSIONAL GROWTH

The next six questions (pages 17-19) ask how the activities affect unit members' professional growth.

Q24. How do the following activities affect unit members' **opportunities for attending PME or academic courses?**

The effect is ...

	Very negative	Negative	Neutral	Positive	Very positive	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q25. How do the following activities affect unit members' **opportunities to complete formal upgrade training steps?**

The effect is ...

	Very negative	Negative	Neutral	Positive	Very positive	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q26. How do the following activities affect unit members' **opportunities for self study?**

The effect is...

	Very negative	Negative	Neutral	Positive	Very positive	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises..	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q27. How do the following activities affect the **need for training waivers?**

The need for waivers is ...

	Very few	Few	Neutral	High	Very High	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises..	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

PROFESSIONAL GROWTH

Q28. How do the following activities affect unit members' **opportunities for career-broadening events?**

The effect is ...

	Very negative	Negative	Neutral	Positive	Very positive	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q29. How do the following activities affect unit members' **opportunities for community involvement?**

The effect is ...

	Very negative	Negative	Neutral	Positive	Very positive	Not applic- able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

These next four questions (pages 20-21) ask how the activities affect unit members' personal and family lives.

Q30. How do the following activities affect unit members' **ability to plan and take their annual leave?**

The effect is ...

	Very negative	Negative	Neutral	Positive	Very positive	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q31. How do the following activities affect unit members' ability to **attend family events** (births, graduations, anniversaries, etc.)?

The effect is ...

	Very negative	Nega-tive	Neutral	Positive	Very positive	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

PERSONAL AND FAMILY LIFE

Q32. How do the following activities affect unit members' **health** (stress, drinking, smoking, etc.)?

The effects are ...

	Very negative	Nega-tive	Neutral	Positive	Very positive	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

Q33. How do the following activities affect unit members' **family relationships** (separations, incidents of abuse, etc.)?

The effects are ...

	Very negative	Nega-tive	Neutral	Posi-tive	Very positive	Not applic-able
1. Routine peacetime operations and local training	1	2	3	4	5	N/A
2. Off-base training	1	2	3	4	5	N/A
3. Inspections	1	2	3	4	5	N/A
4. Peacekeeping/operations other than war	1	2	3	4	5	N/A
5. Wing exercises	1	2	3	4	5	N/A
6. Command exercises	1	2	3	4	5	N/A
7. Joint exercises	1	2	3	4	5	N/A
8. Combined exercises	1	2	3	4	5	N/A
9. HHQ/other tasking	1	2	3	4	5	N/A
10. Other local tasking	1	2	3	4	5	N/A

Comments:

The remaining questions ask about TDY, duty days, and the amounts of time that go into the different activities.

Q34. **During each of the following activities, what proportion of your unit typically goes TDY?**

1. Routine peacetime operations and local training .... _____ %
2. Off-base training .... _____ %
3. Inspections .... _____ %
4. Peacekeeping/operations other than war .... _____ %
5. Wing exercises .... _____ %
6. Command exercises .... _____ %
7. Joint exercises .... _____ %
8. Combined exercises .... _____ %
9. HHQ/other tasking .... _____ %
10. Other local tasking .... _____ %

Comments:

Q35. **How long are people typically away from home when they go TDY for these activities?**

1. Routine peacetime operations and local training .... _____ DAYS
2. Off-base training .... _____ DAYS
3. Inspections .... _____ DAYS
4. Peacekeeping/operations other than war .... _____ DAYS
5. Wing exercises .... _____ DAYS
6. Command exercises .... _____ DAYS
7. Joint exercises .... _____ DAYS
8. Combined exercises .... _____ DAYS
9. HHQ/other tasking .... _____ DAYS
10. Other local tasking .... _____ DAYS

Comments:

Q36. **When this activity occurs, how long is the average work day and how many work days are there in an average week for people who are TDY and for those at home station?**

	THOSE TDY (hrs per day / days per week)	THOSE AT HOME STATION (hrs per day / days per week)
1. Routine peacetime operations and local training ..	_____/_____	_____/_____
2. Off-base training	_____/_____	_____/_____
3. Inspections	_____/_____	_____/_____
4. Peacekeeping/operations other than war	_____/_____	_____/_____
5. Wing exercises	_____/_____	_____/_____
6. Command exercises	_____/_____	_____/_____
7. Joint exercises	_____/_____	_____/_____
8. Combined exercises	_____/_____	_____/_____
9. HHQ/other tasking	_____/_____	_____/_____
10. Other local tasking	_____/_____	_____/_____

Comments:

Q37. **List the different AFSCs in your unit and how many personnel there are of each. (Break out AFSCs to the 3-digit level for enlisted personnel and to the 2-digit level for officers-- e.g. 12F4Y would be 12 for an officer).**

ENLISTED AFSC	Number		OFFICER AFSC	Number
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐
☐☐☐	☐		☐☐	☐

Q38. List the categories of civilian personnel in your unit and how many there are of each.

Category of civilians   Number

_____   [   ]

_____   [   ]

_____   [   ]

_____   [   ]

_____   [   ]

_____   [   ]

_____   [   ]

_____   [   ]

This table may help you convert time estimates into annual percentages in answering question 39.

No. of	1	2	3	4	5	6
Months	8%	17%	25%	33%	42%	50%
Weeks	2%	4%	6%	8%	10%	12%
Days	0%	1%	1%	1%	1%	2%

Q39.   Considering the last 12 months, how much time did your unit spend on the activities below? (Please try to make the percentages add up to 100%.)

1. Routine peacetime operations and local training .... _____ %

2. Off-base training .... _____ %

3. Inspections .... _____ %

4. Peacekeeping/operations other than war .... _____ %

5. Wing exercises .... _____ %

6. Command exercises .... _____ %

7. Joint exercises .... _____ %

8. Combined exercises .... _____ %

9. HHQ/other tasking .... _____ %

10. Other local tasking .... _____ %

                                                    TOTAL: 100 %

TIME SPENT

Q40. **Did any AFSCs or other groups in your unit spend notably more or less time on any of these activities?**

☐ ₁ Yes → Continue with Q. 41   ☐ ₂ No → Skip to Q. 42, next page

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Q41. **List any AFSCs or other groups in your unit that spent notably more or less time on any of these activities.**

	AFSCs OR OTHER GROUPS WHO SPENT *MORE* TIME	AFSCs OR OTHER GROUPS WHO SPENT *LESS* TIME
1. Routine peacetime operations and local training	_____	_____
2. Off-base training......................................	_____	_____
3. Inspections	_____	_____
4. Peacekeeping/operations other than war	_____	_____
5. Wing exercises..	_____	_____
6. Command exercises	_____	_____
7. Joint exercises	_____	_____
8. Combined exercises	_____	_____
9. HHQ/other tasking....................................	_____	_____
10. Other local tasking	_____	_____

Comments:

This table may help you convert time estimates into annual percentages in answering question 42.

No. of	1	2	3	4	5	6
Months	8%	17%	25%	33%	42%	50%
Weeks	2%	4%	6%	8%	10%	12%
Days	0%	1%	1%	1%	1%	2%

Q42. How much of the time would you <u>recommend</u> that your unit spend annually on each activity? (Again, please make the percentages add up to 100%.)

1. Routine peacetime operations and local training .... _____ %

2. Off-base training .... _____ %

3. Inspections .... _____ %

4. Peacekeeping/operations other than war .... _____ %

5. Wing exercises .... _____ %

6. Command exercises .... _____ %

7. Joint exercises .... _____ %

8. Combined exercises .... _____ %

9. HHQ/other tasking .... _____ %

10. Other local tasking .... _____ %

                                                        TOTAL: 100   %

Comments:

Thank you.

Please bring this form with you to a discussion that will be scheduled with researchers from RAND. Your completed form will stay with the RAND study group.